AD-A141 351 TABULATIONS OF AMBIENT OZONE DATA OBTAINED BY GASP (GLOBAL AIR SAMPLING P..(U) NATIONAL AERONAUTICS AND SPACE ADMINISTRATION CLEVELAND OH LE..

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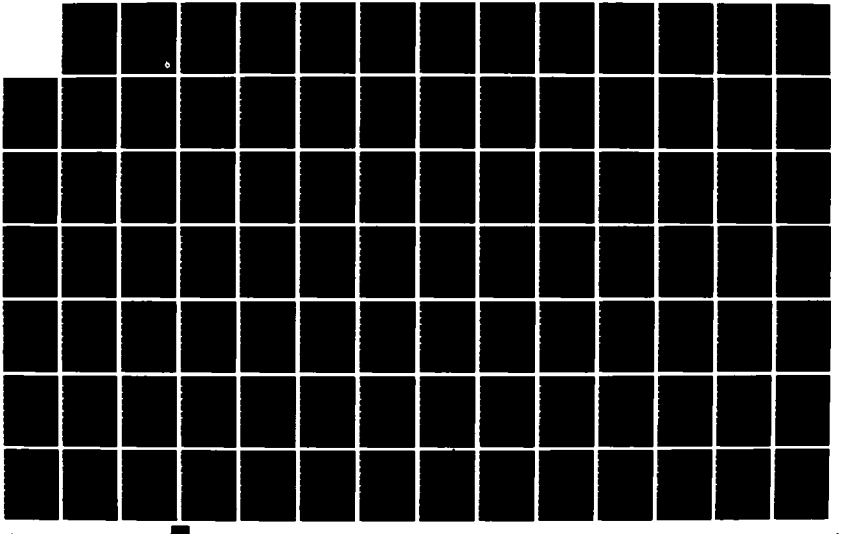

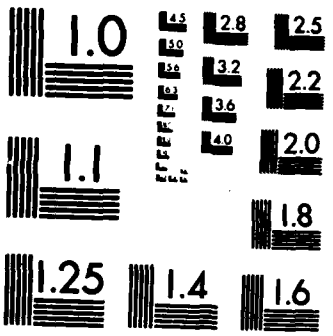

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Tabulations of Ambient Ozone Data Obtained by GASP Airliners; March 1975 to July 1979

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NASA

PREFACE

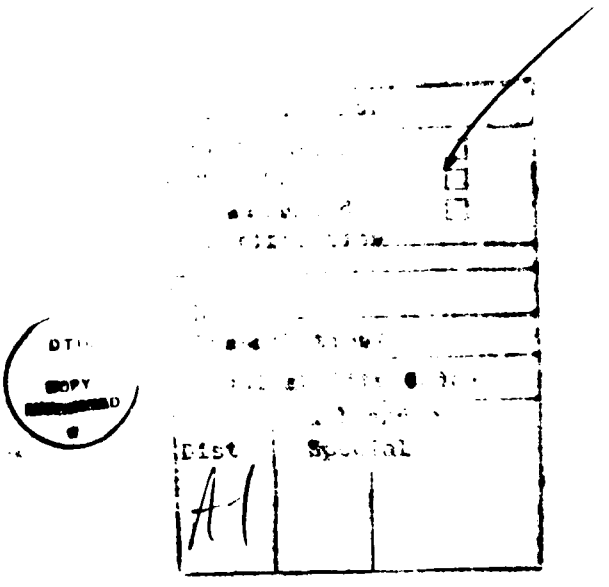
This report contains part of the data, either obtained by the Global Air Sampling Program (GASP) or analyzed from existing ozonesonde measurements since the publication of Federal Aviation Administration (FAA) Report Number FAA-EQ-78-03, "Guidelines for Flight Planning During Periods of High Ozone Occurrence," in 1978.

The FAA has published Advisory Circular 120-38, "Transport Category Airplanes Cabin Ozone Concentrations" dated October 10, 1980. (Copies of this advisory circular may be obtained free of charge from the United States Department of Transportation, Publications Section M-443.1, Washington, D.C. 20590.) In this advisory circular, examples are presented for acceptable (but not the only) means for an air carrier to demonstrate compliance with the maximum permissible cabin ozone concentrations established by Section 121.578 of the Federal Aviation Regulations (FAR). In paragraph 6 and Appendix 2 of the advisory circular, it is stated that any ozone data set used to show compliance must have, as a minium, a resolution on a monthly basis of 2,000 feet in altitude and 5 degrees in latitude.

The data in this report have not been statistically compared with those published in the FAA Report Number FAA-EQ-78-03 to determine whether they are comparable. Hence, use of the data tabulated in this report, to show compliance with Section 121.578 of the FAR, is not acceptable.

Since the data sets have been compiled, however, the FAA would like to disseminate them at this time as information to the scientific community and other interested groups.

John E. Wesler
Director of Environment and Energy
Federal Aviation Administration



TABULATIONS OF AMBIENT OZONE DATA OBTAINED BY GASP AIRLINERS: MARCH 1975 TO JULY 1979

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SUMMARY

Tabulations are given of GASP ambient ozone mean, standard deviation, median, 84th percentile, and 98th percentile values, by month, flight level, and geographical region. These data are tabulated to conform to the temporal and spatial resolution required by FAA Advisory Circular 120-38 (monthly by 2000 ft in altitude by 5° in latitude) for climatological data used to show compliance with cabin ozone regulations. In addition seasonal x 10° latitude tabulations are included which are directly comparable to and supersede the interim GASP ambient ozone tabulations given in appendix B of FAA-EE-80-43. Selected probability variations are highlighted to illustrate the spatial and temporal variability of ambient ozone and to compare results from the coarse and fine grid analyses.

INTRODUCTION

From March 1975 to July 1979, the NASA Global Atmospheric Sampling Program (GASP) obtained atmospheric trace-constituents data in the upper troposphere and lower stratosphere using fully automated sampling systems on several Boeing 747 airplanes in routine commercial service (ref. 1). GASP systems were operated on a United Airlines B747, two Pan American World Airways B747's, and a Qantas Airways of Australia B747. Data from the United airliner were over the contiguous United States and between the U.S. West Coast and Hawaii. Global coverage was provided by the Pan American and Qantas airliners on routes between U.S.A. and Europe, U.S.A. and South America, U.S.A. and Japan, U.S.A. and Australia, Australia and Africa, and Australia and Europe. The complete GASP dataset consists of 667 385 trace constituent and/or meteorological observations made on 6945 flights of these airliners between March 11, 1975, and July 12, 1979.

In response to government and public concern because of reports attributing illness of some people on long duration flights to excessive ozone exposure, measurements of ozone concentration in the cabins of two GASP-equipped B747's were made from March 1977 to June 1979. Results from these measurements are reported in references 2 to 7.

In addition to the simultaneous cabin and ambient ozone measurements, GASP acquired over 160 000 ambient ozone observations around the world at airliner cruise altitudes from March 1975 to June 1979. These have added considerably to the climatological data base over what was previously available from ozonesondes, and have provided data in geographical regions where none were previously extant.

Early GASP ambient ozone tabulations and ozonesonde ambient ozone tabulations were published in 1978 (ref. 8). Considerably expanded, but still interim

GASP ambient ozone tabulations were published in reference 9. This report includes all available GASP ambient ozone data, tabulated to conform to the temporal and spatial resolution specified in reference 10, for climatological data used to show compliance with cabin ozone regulations. In addition, tabulations are included for a coarser temporal and spatial grid; these data are directly comparable to and supercede the interim tables in appendix B of reference 9.

INSTRUMENTATION

Ozone was measured on all aircraft by commercially available ultraviolet absorption photometers modified and repackaged to operate in the airborne environment (ref. 11). Readings are continuous, updating every 20 seconds, with data recorded nominally eight times per hour. The instrument range is from 0.003 to 20 ppmv (parts per million by volume). Operational procedures, set up to insure the integrity of the data, included in-flight instrument health checks, instrument calibration techniques, measurement of ozone loss in the GASP air sample inlet line and pressurization system and periodic instrument maintenance.

All flight instruments were calibrated before installation in the aircraft and periodically thereafter using a secondary transfer standard. This standard is a laboratory-type ultraviolet (UV) photometer which was initially calibrated using a 1 percent neutral buffered potassium iodide (KI) method. Later in the GASP program, the standard was calibrated at the NASA Jet Propulsion Laboratory (JPL). This calibration is traceable to the JPL 5-meter UV photometer described in reference 12. The KI calibration was found to be 9 percent higher than the UV photometer calibration. Thus, all published GASP ozone data are 9 percent higher than the JPL calibrations. This is a systematic difference and the tabulated data can be easily corrected if the KI method is determined to be incorrect and another method, such as the UV photometer, is adopted as the standard.

The random error of the GASP ozone measuring system was found to be less than 4 percent of reading or 0.003 ppmv, whichever is greater. A complete description of the ozone measurement system is given in reference 11.

PRESENTATION OF DATA

Availability

All GASP data are available to the public on magnetic computer tape from the National Climatic Center, Federal Building, Asheville, North Carolina 28801. The data tabulated here are from GASP tapes VL0001 to VL0031. These tapes include all data obtained by GASP-equipped aircraft (March 11, 1975, to July 12, 1979). Flight routes and dates, instrumentation, data processing procedures, data tape specifications, and selected analysis are reported in references 13 to 24.

Explanation of Data Tables

In this report ozone amounts are expressed as a volumetric mixing ratio, parts per million by volume (ppmv). Since ozone levels in the literature may be expressed in any of several commonly used units, the inter-relationship among these is given in appendix A (p. 103). Note that several of these relations require that temperature and/or pressure be known or assumed and that the conversion of averaged values will be an approximation because of the non-linearity of the conversion.

The GASP data are summarized by month for 2000-ft altitude increments (from FL290 to FL430) in geographical regions of 5° latitude by 45° longitude in tables I to XII (pp. 4 to 99). The geographical grid used is shown in figure 1 (p. 100). This grid was selected so that regions, or combinations of adjacent regions, coincide with major flight routes as nearly as possible (e.g., contiguous States = 27.5° to 47.5° N, 75° to 120° W; and U.S.A. to Europe = 37.5° to 57.5° N, 15° E to 75° W). For each region the tabulation includes mean, standard deviation, median (50th percentile), 84th percentile, and 98th percentile ozone amounts, in addition to the number of observations. For applications in which a coarser spatial and temporal grid is acceptable, seasonal x 10° latitude tabulations are provided in appendix B (p. 104). Note that, because the number of observations in the tabulated regions is greater here than in tables I to XII, the statistical confidence level is greater in most intervals.

Selected Graphical Presentations

It is well known that ozone levels increase with latitude and altitude, that they are maximum in the spring, and that the probability of encountering high ozone levels follows the same trends (e.g., refs. 2, 6, and 9). These variations are quantified in the tables herein, with selected empirical probability variations highlighted in figures 2 to 5 (pp. 101 and 102). These figures are examples of the types of curves that can readily be plotted from, and that might be appropriate in specific analyses of, the tabulated data.

In figure 2 the variation of the mean ozone mixing ratio with latitude is shown for low, medium, and high cruise altitudes in the spring (part (a)), and for each spring month at flight level 370 (part (b)). The seasonal variation in mean ambient ozone near 45° N is shown in figure 3 for flight levels 370 and 410.

In figure 4 four-point cumulative frequency distributions (cfd's) for the spring have been plotted from the tabulated data for Northern Hemisphere latitudes at flight level 370 (part (a)) and for flight levels 290 to 430 at 40° to 50° N latitude (part (b)). These curves show the fraction of observations (on the ordinate) in which the ozone level exceeded any given ozone level (on the abscissa). For example, at flight level 370 and 40° to 50° N latitude, the probability of encountering ambient ozone greater than 0.3 ppmv would be about 37 percent.

Figure 5 shows the zonal latitude-flight level cross section of the 84th percentile ozone values for spring. The constant mixing ratio contours define regions where the probability is greater than 16 percent that the ozone will exceed the contour value on any independent observation; that is, the probability of encountering ozone above, say 0.2 ppmv, is greater than 16 percent in all regions where the 84th percentile value is greater than 0.2 ppmv. In figure 6, the same data used in figure 5 are crossplotted to show the vertical distributions of the 84th percentile values at selected latitudes.

CONCLUDING REMARKS

Tabulations are given of GASP ambient ozone mean, standard deviation, median, 84th percentile, and 98th percentile values, by month, flight level, and geographical region. These data are tabulated to conform to the temporal and spatial resolution specified in FAA-AC-120-38, and supersede those in appendix B of FAA-EQ-78-03 (ref. 8) and appendix B of FAA-EE-80-45 (ref. 9). Selected probability variations are shown herein to highlight the spatial and temporal variability of ambient ozone and to illustrate and compare the results from the coarse and fine grid analyses.

TABLE I. - GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(a) Flight level 290

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

JANUARY
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55								.077 .061 .049 .099 6 .171	.077 .061 .049 .099 6 171	
50						.043 .038 .010 .061 3 .056		.073 .056 .055 .091 18 .214	.066 .055 .052 .066 21 .212	
45	.084 .071 .039 .106 28 .182				.041 1	.047 .042 .020 .045 10 .093	.054 .060 .018 .067 3 .071	.108 .072 .088 .177 5 .179	.076 .064 .042 .104 47 .191	
40	.073 .067 .038 .123 14 .145				.026 .027 .024 .050 4 .062	.101 .082 .088 .197 9 .276	.048 .036 .036 .078 4 .103		.071 .052 .061 .111 31 .257	
35	.062 .056 .018 .061 19 .102		.154 .154 .099 .221 2 .248		.036 .035 .019 .060 5 .071	.045 .042 .016 .046 20 .088			.056 .041 .035 .073 46 .120	
30	.067 .062 .015 .067 18 .087	.041 1							.058 .061 .015 .067 17 .066	
25	.043 .045 .016 .066 18 .072	.048 .048 .001 .049 2 .048	.027 1		.032 .037 .010 .040 9 .043				.039 .034 .015 .053 30 .067	
20		.055 .081 .011 .089 9 .080	.061 1		.052 .038 .034 .083 11 .123				.053 .050 .026 .067 21 .119	
15		.059 .067 .019 .068 11 .089			.025 .024 .007 .032 20 .039	.041 1			.037 .031 .020 .067 32 .069	
10		.061 .066 .012 .067 9 .073		.029 .029 .002 .030 2 .031		.042 .039 .011 .062 4 .059			.052 .060 .016 .066 15 .072	
5		.029 .029 .007 .034 2 .036							.029 .029 .007 .034 2 .036	
0		.032 1	.026 .026 .005 .029 2 .031						.028 .031 .005 .032 3 .032	
5			.029 .028 .007 .031 7 .044						.029 .028 .007 .031 7 .044	
10			.039 .039 .003 .041 7 .043						.039 .039 .003 .041 7 .043	
15			.060 1	.010 .010 .005 .013 2 .014					.026 .014 .024 .045 3 .058	
20				.006 1					.006 1	
25	.081 1			.042 .043 .003 .046 4 .046					.046 .043 .008 .051 5 .060	
30			.039 1	.038 .038 .011 .048 12 .068					.038 .038 .010 .047 13 .056	
35			.042 1	.040 .040 .013 .063 7 .056					.041 .040 .012 .063 8 .056	
40										
45S										

LONGITUDE

TABLE I. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(b) Flight level 310

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

JANUARY
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55								.081 .062 22 .062 .140 .190		.081 .062 22 .062 .140 .190
50					.145 .167 .088 .240 11 .276			.071 .039 .071 .156 26 .242		.093 .047 .082 .192 37 .285
45	.127 .101 .066 .142 7 .285				.073 .030 .077 .139 18 .249	.095 .069 .087 .149 28 .287	.073 .036 .069 .175 24 .210	.075 .033 .086 .105 20 .322		.084 .054 .075 .159 97 .290
40	.086 .093 .038 .123 25 .159				.071 .026 .093 .112 13 .302	.077 .047 .063 .127 38 .251	.083 .064 .064 .124 6 .207			.079 .047 .063 .123 82 .263
35	.080 .079 .033 .122 31 .137		.088 .085 .035 .103 19 .145		.040 .032 .026 .047 34 .134	.084 .048 .068 .057 22 .270				.062 .037 .044 .100 106 .153
30	.061 .052 .035 .081 39 .156	.038 .040 .007 .046 10 .050	.042 .016 .037 .064 20 .106		.032 .028 .013 .045 30 .085	.041 .041 .005 .044 2 .046				.046 .040 .031 .073 101 .127
25	.086 .075 .032 .114 17 .156	.060 .054 .025 .061 12 .124	.019 .012 .013 .038 18 .040		.033 .032 .010 .037 13 .056					.050 .040 .035 .074 58 .146
20		.043 .043 .011 .051 31 .064	.018 .017 .009 .026 13 .037	.052 .060 .012 .061 18 .077	.045 .043 .018 .053 23 .097	.046 1				.042 .026 .017 .053 80 .083
15		.046 .046 .017 .064 23 .071	.022 .021 .005 .027 6 .028		.018 .016 .009 .023 12 .033	.059 1				.034 .030 .020 .058 42 .071
10				.028 .029 .004 .031 18 .033	.020 .019 .006 .027 6 .029	.045 .045 .005 .048 2 .049	.040 .040 .005 .044 6 .048			.030 .029 .009 .040 29 .048
5		.039 .042 .017 .060 13 .084		.018 .018 .006 .023 28 .033						.025 .020 .014 .038 42 .061
0				.014 .014 .003 .017 21 .018						.014 .014 .003 .017 21 .018
5				.012 .012 .002 .014 15 .016						.012 .012 .002 .014 15 .016
10				.020 .018 .006 .026 7 .032						.020 .018 .006 .026 7 .032
15			.041 .041 .005 .049 6 .048				.049 .048 .003 .082 5 .053			.044 .046 .006 .049 11 .053
20	.011 1	.088 1	.100 1	.017 .022 .010 .026 5 .029			.031 .039 .013 .040 3 .041			.031 .023 .026 .047 11 .091
25	.048 .041 .024 .078 15 .093	.070 .070 .012 .083 6 .084		.042 1						.056 .044 .023 .084 24 .092
30			.084 .085 .021 .082 27 .096	.025 .022 .009 .032 3 .036						.060 .061 .023 .081 30 .096
35			.132 .081 .099 .275 12 .266	.038 .031 .010 .043 4 .082						.108 .076 .095 .257 16 .287
40										
45S										

LONGITUDE

TABLE I. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(c) Flight level 330

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

JANUARY
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60							.282 .304 98 381 25 .422	.163 .163 55 .220 20 .241		.229 .199 101 .352 45 .404	60
55				.302 .283 61 .384 41 .452	.243 .239 85 .317 25 .366		.192 .215 110 .287 60 .417	.098 .079 63 .164 60 .253		.193 .161 116 .311 166 .425	55
50				.298 .318 56 .346 27 .390	.092 .038 91 .198 14 .272	.233 .226 164 .421 12 .517	.126 .099 97 .228 48 .341	.075 .032 86 .215 38 .290		.151 .115 126 .303 139 .395	50
45	.137 .099 .090 .212 4 278		.268 .188 118 .393 7 .424	.358 .374 .091 .418 17 .524	.041 .036 .010 .049 7 .059	.191 .145 .112 .321 9 .380	.069 .041 054 .154 51 .181	.084 .030 .091 .193 20 .293		.137 .064 133 .309 115 .428	45
40	.104 .068 .077 .185 34 281		.196 .227 .096 .272 21 .389	.087 .087 .061 .115 11 .232	.087 .052 .062 .084 10 .213	.144 .136 .119 .289 45 .403	.043 .036 .034 .043 23 .152			.117 .060 101 .230 144 .370	40
35	.101 .084 .034 .136 17 163		.128 .096 .094 .191 26 .341	.111 .088 .067 .181 17 .255	.065 .045 .053 .124 87 .210	.139 .105 .115 .259 17 .389				.091 .059 076 .141 164 .315	35
30	.096 .076 .056 .105 10 233	.095 .088 .029 .131 6 .135	.051 .053 .011 .062 9 .064		.050 .043 .028 .072 92 .128	.070 .065 .030 .096 23 .140				.059 .048 .034 .082 140 .152	30
25	.044 1	.074 .062 .042 .072 7 .161	.028 .029 .004 .031 7 .034		.042 .036 .023 .058 66 .113	.052 .049 .015 .066 24 .089				.046 .041 .024 .062 105 .114	25
20		.065 .056 .025 .080 5 .103	.011 1	.039 .026 .025 .068 27 .086	.055 .041 .036 .072 16 .155	.043 .041 .010 .053 24 .063				.045 .040 .027 .066 73 .118	20
15		.057 .060 .011 .065 9 .073				.047 .045 .012 .055 17 .068				.050 .049 .013 .063 26 .072	15
10		.074 .069 .008 .082 11 .088				.038 .038 .018 .049 2 .054	.029 .029 .004 .031 2 .032			.063 .069 .020 .080 15 .087	10
5		.047 .047 .018 .071 22 .078				.013 1	.019 .018 .007 .027 11 .028			.037 .034 .021 .058 34 .077	5
0		.027 .029 .007 .032 13 .038					.018 .018 .003 .019 7 .023			.024 .022 .007 .032 20 .037	0
5		.027 .028 .008 .031 14 .035		.012 .012 .002 .013 14 .015						.019 .016 .008 .028 28 .034	5
10		.032 .030 .014 .049 18 .061		.014 .013 .005 .021 28 .025						.021 .016 .013 .031 46 .052	10
15		.042 .040 .010 .052 17 .063		.020 .013 .013 .034 15 .037						.032 .034 .016 .046 32 .060	15
20	.071 .079 .017 .066 8 .069	.042 .041 .003 .045 10 .046	.058 .062 .014 .069 8 .077	.031 .031 .009 .041 38 .045			.044 1			.041 .038 .018 .057 65 .085	20
25	.087 .089 .023 .096 13 .107	.106 .106 .020 .122 3 .128	.066 .059 .018 .068 18 .096	.042 .033 .021 .063 47 .093						.051 .038 .025 .077 82 .111	25
30		.061 .059 .020 .083 20 .096	.069 .073 .029 .094 21 .123	.042 .034 .025 .069 67 .101						.051 .038 .027 .078 108 .113	30
35			.091 .104 .078 .122 7 .230	.026 .023 .017 .039 20 .067						.042 .027 .050 .075 27 .178	35
40			.041 1	.039 .036 .011 .049 25 .063						.039 .036 .011 .049 26 .063	40
45S											45S

LONGITUDE

TABLE I. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JANUARY
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65					.360 .108 39 .369 .456 .577	.312 .131 13 .304 .366 .600				.347 .117 48 .335 .483 .614	65
60						.305 .103 49 .310 .371 .563	.176 .078 10 .148 .262 .312	.294 .087 6 .313 .350 .393		.264 .108 65 .306 .383 .560	60
55				.370 .018 3 .367 .385 .393	.348 .054 5 .371 .387 .411	.273 .142 69 .259 .423 .537	.315 .129 65 .319 .444 .631	.084 .096 28 .042 .137 .353		.252 .152 170 .159 .422 .536	55
50				.332 .099 14 .314 .430 .611	.395 .024 7 .387 .417 .434	.258 .169 59 .230 .412 .652	.175 .193 25 .049 .462 .523	.183 .152 76 .134 .366 .509		.226 .168 181 .209 .414 .530	50
45	.230 .117 74 .224 .340 .450			.309 .181 16 .441 .474 .540	.156 .097 33 .166 .260 .371	.223 .112 113 .233 .329 .468	.087 .108 82 .048 .158 .480	.191 .124 9 .128 .340 .380		.187 .132 326 .119 .324 .478	45
40	.147 .098 91 .111 .270 .382		.284 .222 14 .390 .509 .583	.277 .092 8 .299 .345 .374	.135 .116 56 .090 .298 .387	.207 .160 76 .187 .369 .659	.161 .185 16 .072 .313 .615			.176 .144 264 .111 .342 .545	40
35	.157 .124 34 .097 .262 .450		.134 .097 14 .106 .171 .378	.127 .090 14 .084 .213 .347	.120 .128 209 .068 .219 .464	.082 .080 31 .062 .113 .329				.121 .122 302 .071 .244 .458	35
30	.097 .090 27 .059 .227 .303	.038 .016 23 .033 .064 .073	.050 .010 4 .050 .059 .063	.040 .013 26 .036 .055 .070	.092 .095 260 .053 .171 .404	.047 .010 20 .047 .052 .069				.083 .060 359 .049 .144 .343	30
25	.066 .028 10 .073 .081 .102	.051 .028 32 .042 .068 .128	.022 1	.034 .010 37 .034 .046 .052	.054 .031 276 .047 .080 .149	.037 .009 24 .037 .045 .051				.051 .029 360 .042 .074 .134	25
20	.079 .008 4 .003 .085 .085	.054 .025 41 .055 .080 .092		.013 .002 2 .013 .014 .014	.039 .014 60 .037 .050 .074	.045 .023 28 .035 .074 .084				.046 .021 135 .039 .074 .088	20
15		.044 .018 17 .048 .056 .067			.035 .013 21 .029 .054 .060	.038 .008 26 .040 .046 .049	.048 .007 7 .043 .055 .058			.039 .013 71 .040 .054 .062	15
10		.052 .018 18 .050 .062 .092		.011 .001 4 .011 .012 .012	.026 .011 23 .024 .035 .054	.039 .006 4 .039 .045 .046	.040 .009 7 .034 .050 .052			.036 .018 56 .033 .051 .064	10
5		.060 .021 16 .067 .078 .082		.009 .004 7 .007 .013 .015	.032 1		.039 .013 10 .038 .052 .058			.042 .025 34 .031 .074 .081	5
0		.032 .015 6 .030 .041 .060	.035 .016 10 .043 .047 .050	.012 .005 12 .011 .017 .020			.029 .015 9 .032 .044 .050			.026 .016 37 .028 .044 .054	0
5		.029 .004 2 .029 .031 .032	.031 .013 14 .030 .042 .056	.011 .010 12 .006 .018 .033			.033 .006 13 .034 .038 .042			.025 .014 41 .026 .038 .051	5
10			.032 .021 14 .032 .050 .074	.013 .005 20 .012 .017 .024			.042 .013 14 .039 .055 .066			.027 .018 48 .017 .046 .070	10
15		.042 .017 2 .042 .053 .057	.047 .016 15 .043 .065 .066	.017 .007 34 .015 .026 .032			.050 .008 9 .046 .057 .064			.031 .019 60 .022 .056 .065	15
20		.055 .005 5 .054 .059 .063	.055 .017 25 .050 .066 .089	.032 .023 46 .028 .039 .104						.041 .023 76 .035 .058 .103	20
25			.068 .020 22 .070 .085 .104	.037 .030 52 .035 .047 .114						.046 .030 74 .041 .075 .114	25
30			.076 .023 8 .081 .088 .115	.044 .022 56 .037 .068 .095						.048 .024 64 .039 .078 .106	30
35			.089 .039 40 .063 .106 .150	.037 .016 36 .034 .055 .071						.053 .034 76 .032 .091 .125	35
40				.029 .011 16 .027 .036 .051						.028 .011 15 .027 .036 .051	40
45S											45S

LONGITUDE

TABLE I. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JANUARY
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					325 171 11 211 524 547					325 171 11 211 524 547
60				263 185 5 143 433 572	305 134 66 343 436 526	280 089 12 290 365 402				299 133 83 319 426 537
55				422 164 63 396 545 862	416 131 31 442 556 617	430 118 7 422 473 558	294 142 17 300 385 610	301 159 36 335 446 591		379 163 154 305 320 784
50				511 135 35 512 661 764	176 092 27 147 276 383	374 063 7 359 455 477	112 125 115 053 222 434	279 164 115 250 437 720		235 190 299 192 437 683
45	199 085 13 174 261 372		479 022 3 485 497 501	378 210 45 445 579 700	140 100 46 104 229 417	246 097 17 219 367 416	160 129 79 118 295 481	175 117 34 197 300 387		212 165 237 161 409 606
40	187 027 4 183 213 222		414 188 21 385 638 772	306 115 34 301 409 635	162 112 58 156 268 428	233 162 644 224 419 577	137 104 31 149 211 399	159 128 15 083 316 375		230 161 807 211 408 579
35	066 030 6 063 089 116		189 099 32 194 311 324	186 176 75 086 378 590	169 101 432 157 278 383	193 132 222 189 338 511				177 120 762 158 307 495
30	051 039 10 029 105 117		045 017 30 040 063 085	057 008 17 080 062 067	100 070 581 090 177 263	028 1				095 069 639 083 173 257
25	049 030 8 029 076 105	055 015 9 062 067 074	027 005 15 027 029 039		070 036 406 062 100 168					068 036 438 061 098 162
20		022 020 16 016 040 068			050 023 28 044 076 093	078 029 4 065 101 124				042 028 50 034 072 090
15					020 006 14 019 023 034	049 015 17 052 061 074				036 018 31 029 059 072
10				014 008 6 009 024 027	015 009 12 012 020 034	046 007 11 048 052 053	042 005 6 044 045 047			029 017 35 030 048 053
5				010 003 22 010 013 015	019 007 29 018 026 034					015 008 51 013 024 034
0				012 006 25 010 017 024	026 009 21 023 033 045		023 009 7 025 027 034			019 010 53 017 027 040
5				015 006 33 012 022 028	024 009 9 021 029 043		019 004 13 018 023 025			017 007 55 015 023 031
10				021 013 26 019 034 049	023 004 2 023 026 027		018 007 10 017 025 027			020 011 38 017 027 049
15				026 014 27 023 031 060			026 012 12 027 036 044			026 014 39 023 037 060
20				026 005 14 026 029 036			034 023 10 034 060 061			029 016 24 023 054 061
25				026 003 19 025 029 030						026 003 19 025 029 030
30				027 004 8 025 030 034						027 004 8 025 030 034
35			101 069 46 089 203 245	051 1						099 069 47 088 202 245
40			058 011 2 058 063 089	033 008 6 035 038 039						039 013 8 037 046 066
45S										

LONGITUDE

TABLE I. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JANUARY
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65				.556 .064 5 .536 .620 .654	.497 .200 80 .486 .652 .936					.501 .195 85 .492 .653 .933	65
60				.458 .125 58 .432 .583 .750	.416 .136 30 .381 .570 .642	.440 1	.432 .040 8 .426 .471 .498	.467 .072 12 .446 .537 .623		.446 .122 107 .431 .573 .700	60
55				.568 .251 71 .497 .884 1.066	.423 .112 17 .424 .549 .581		.449 .137 16 .435 .583 .712	.417 .195 26 .422 .655 .718		.504 .225 130 .376 .736 1.050	55
50				.401 .090 7 .353 .523 .654	.366 .126 19 .378 .486 .585		.328 .166 26 .378 .512 .564	.317 .061 29 .318 .387 .415		.339 .133 81 .351 .461 .563	50
45	.090 1			.255 .116 27 .304 .342 .479	.086 .049 12 .065 .116 .197	.439 .235 102 .425 .573 1.185	.187 .205 50 .078 .430 .625	.364 .164 23 .357 .535 .566		.328 .236 215 .333 .549 .919	45
40			.455 .036 5 .468 .478 .487	.212 .096 15 .147 .357 .365	.144 .131 7 .085 .231 .406	.321 .181 462 .310 .510 .719	.180 .125 11 .240 .295 .360			.313 .180 500 .307 .500 .718	40
35			.237 .055 8 .213 .310 .329	.188 .138 61 .130 .316 .568	.169 .082 140 .179 .214 .342	.189 .128 97 .141 .319 .492				.181 .111 306 .162 .267 .510	35
30				.037 .016 12 .032 .041 .077	.142 .098 124 .115 .265 .354	.197 .082 21 .228 .262 .308				.141 .099 157 .114 .262 .351	30
25	.104 1			.029 .002 3 .029 .031 .032	.098 .105 47 .069 .142 .474	.023 .003 9 .023 .024 .029				.083 .097 60 .049 .126 .445	25
20			.015 .014 3 .005 .025 .034		.054 .028 18 .053 .085 .090	.026 .005 4 .025 .030 .033				.015 .029 25 .040 .083 .090	20
15			.009 .003 7 .008 .012 .014		.049 .022 20 .051 .074 .076					.039 .026 27 .048 .073 .076	15
10		.009 .003 9 .007 .012 .018	.015 .002 7 .015 .018 .018	.038 .012 6 .035 .053 .055	.045 .016 23 .049 .057 .078					.032 .020 45 .026 .054 .075	10
5		.020 1		.019 .008 8 .020 .026 .029	.038 .006 8 .038 .042 .047					.028 .011 17 .030 .040 .046	5
0			.037 .007 3 .036 .043 .046	.023 .005 4 .024 .026 .028	.045 .011 8 .051 .053 .055					.038 .013 15 .036 .053 .054	0
5			.032 .014 7 .037 .040 .044		.035 .015 23 .033 .053 .062					.035 .015 30 .032 .051 .060	5
10			.014 1	.022 .007 15 .020 .029 .033	.025 .008 9 .028 .031 .032					.022 .008 25 .024 .030 .033	10
15				.022 .007 20 .019 .026 .037						.022 .007 20 .019 .026 .037	15
20				.019 .005 20 .019 .024 .026						.019 .005 20 .019 .024 .026	20
25				.034 .020 18 .028 .043 .087						.034 .020 18 .028 .043 .087	25
30				.080 .040 15 .062 .107 .178						.080 .040 15 .062 .107 .178	30
35				.074 .034 20 .056 .108 .150						.074 .034 20 .056 .108 .150	35
40				.033 .001 3 .034 .034 .034						.033 .001 3 .034 .034 .034	40
45S											45S

LONGITUDE

TABLE I. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(g) Flight level 410

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

JANUARY
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60				530 108 2 530 .603 .634	420 115 13 443 534 .562	.550 140 14 568 657 752	.472 079 6 479 523 .592			.487 134 35 485 638 729	60
55				.907 300 74 926 1.221 1.421	624 1	.582 230 39 502 865 1.040	619 042 7 609 617 .706			.783 310 121 805 1.133 1.388	55
50				.742 301 85 726 1.073 1.289	380 209 17 309 680 .730	561 172 39 518 738 .887	.045 017 18 039 066 .082	.331 220 11 469 545 565		.564 333 170 379 809 1.297	50
45			.613 148 20 620 .717 .889	841 251 91 617 .855 1.254	448 236 86 416 557 1.160	475 183 37 436 639 .904	069 018 15 066 093 097			513 263 249 498 734 1.177	45
40	290 193 9 240 544 629		485 173 67 473 661 897	388 144 20 346 456 780	335 175 132 318 517 701	476 283 60 422 693 1.273	.042 1			401 214 239 394 594 905	40
35	282 178 23 284 465 590		099 022 6 092 116 141	408 200 26 398 675 785	143 088 44 132 207 406	139 040 9 124 138 233				234 181 108 156 449 740	35
30	139 069 17 109 160 418		046 013 9 042 039 070		145 125 42 103 245 510					131 115 68 077 203 499	30
25	085 021 6 077 092 127	074 008 3 070 081 085	032 003 9 032 035 037		068 015 31 067 084 101					064 022 49 067 082 110	25
20		058 017 17 066 073 078	027 004 4 027 031 032		081 023 20 077 107 117					066 026 41 065 099 114	20
15			025 004 6 026 028 029		059 012 7 053 071 081					043 019 13 048 060 079	15
10			025 004 5 025 028 031		041 013 7 049 052 054					034 013 12 026 051 051	10
5			029 009 5 026 038 042		039 002 2 039 040 041					032 009 7 035 041 043	5
0											0
5											5
10				025 003 2 025 026 027						025 003 2 025 026 027	10
15				022 003 7 022 026 027						022 003 7 022 026 027	15
20				029 005 4 029 034 034						029 005 4 029 034 034	20
25				134 076 5 183 199 210						134 076 5 183 199 210	25
30				152 014 4 149 165 174						152 014 4 149 165 174	30
35				190 067 7 225 243 246						190 067 7 225 243 246	35
40											40
45S											45S

LONGITUDE

TABLE I. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(h) Flight level 430

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

JANUARY
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60											60
55							.644 1			.644 1	55
50				.927 .370 2 .927 1.178 1.281			.368 .249 9 .324 .687 .752			.469 .350 11 .331 .747 1.188	50
45			.381 .174 4 .300 .511 .655	.764 .446 10 .712 1.307 1.426			.500 .196 17 .456 .678 .918			.570 .330 31 .481 .909 1.414	45
40			.377 .093 13 .346 .425 .589		.529 .101 24 .536 .632 .662	.140 .027 3 .131 .162 .175	.568 .251 2 .568 .739 .809			.456 .156 42 .464 .616 .733	40
35			.424 .148 2 .424 .525 .566		.266 .049 8 .250 .331 .345	.106 .053 9 .086 .088 .229				.207 .126 19 .238 .284 .491	35
30											30
25	.104 .048 25 .085 .143 .242	.071 .008 7 .070 .077 .083								.097 .045 32 .083 .139 .236	25
20		.063 .013 27 .056 .074 .083								.063 .013 27 .066 .074 .083	20
15											15
10											10
5											5
0											0
5											5
10											10
15											15
20											20
25											25
30											30
35				.112 .062 53 .101 .186 .264						.112 .062 53 .101 .186 .264	35
40											40
45S											45S

LONGITUDE

TABLE II. - GASP AMBIENT OZONE DATA BY LATUTUDE FOR FEBRUARY

(a) Flight level 290

CODE:	MEAN	ST. DEV.	N
	50%	44%	98%

FEBRUARY
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60											60
55						059 016 6 051 068 091		052 004 3 054 055 055		056 014 9 051 059 069	55
50					052 1	057 004 2 057 060 061		078 1		061 010 4 057 070 077	50
45						224 1				224 1	45
40	053 014 3 050 064 070					014 045 10 036 106 [illegible]	071 035 4 054 096 127			058 039 17 050 104 137	40
35	047 [illegible] 2 047 [illegible] 046		06 [illegible] 6 068 [illegible] 245		032 087 8 060 139 281	049 014 8 050 064 [illegible]				078 066 24 044 101 282	35
30		061 1				092 1				077 016 2 077 087 091	30
25	[illegible] 5 [illegible] 140		051 1		048 014 17 053 051 071					063 038 23 054 075 172	25
20		[illegible] 1	[illegible] 7 035 [illegible] 069		032 016 16 025 050 064					036 016 21 029 052 068	20
15					030 009 22 030 037 049					030 009 22 029 037 049	15
10		[illegible] 005 3 [illegible] 025 028	040 1	078 [illegible] 2 078 082 084	056 1					045 023 7 040 072 043	10
5		026 002 6 025 027 031								026 002 6 025 027 031	5
0		026 1								026 1	0
5			014 008 3 018 020 021							014 008 3 018 020 021	5
10			019 003 6 020 021 023							019 003 6 019 021 023	10
15			025 011 7 022 033 045	024 004 2 024 026 027						024 010 9 022 031 045	15
20			027 004 3 026 030 033							027 004 3 025 030 033	20
25				031 1						031 1	25
30		054 1	054 017 6 054 064 082	058 009 10 056 068 076						056 013 17 055 067 082	30
35			035 030 2 035 055 064	063 020 16 061 083 105						060 023 18 061 079 104	35
40			152 1							152 1	40
45S											45S

LONGITUDE

TABLE II. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(b) Flight level 310

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

FEBRUARY
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60							.053 .007 10 .052 .055 .068	.056 .006 10 .059 .060 .067		.055 .007 20 .048 .060 .070
55							.176 .099 8 .145 .293 .323	.056 .006 12 .059 .061 .064		.104 .086 20 .081 .153 .316
50								.069 .044 23 .049 .097 .194		.069 .044 23 .049 .097 .194
45	.077 .023 10 .073 .101 .118				.117 1	.151 .068 24 .149 .218 .305		.085 .028 10 .079 .114 .139		.119 .063 45 .102 .163 .268
40	.073 .007 3 .074 .079 .081			.072 .020 9 .066 .086 .102	.094 .082 7 .050 .153 .255	.089 .068 33 .070 .130 .269	.119 .092 8 .061 .253 .269			.090 .069 60 .054 .132 .270
35	.066 .010 2 .066 .072 .079		.112 .095 13 .092 .173 .338	.078 .025 3 .064 .098 .112	.058 .039 37 .044 .067 .189	.069 .072 15 .056 .080 .256				.071 .063 70 .049 .095 .281
30		.084 .034 14 .078 .100 .187			.097 .093 56 .062 .144 .387	.047 1				.094 .084 71 .067 .125 .384
25	.069 .022 19 .070 .075 .128	.074 .036 33 .063 .078 .173	.057 .018 5 .056 .072 .083	.075 .002 2 .076 .076 .078	.060 .025 36 .060 .078 .124					.067 .029 95 .063 .076 .169
20		.040 .012 31 .041 .051 .061	.030 .008 13 .029 .038 .043		.036 .027 25 .031 .064 .097					.037 .019 69 .038 .051 .074
15		.030 .012 18 .037 .041 .043	.030 .015 8 .036 .042 .042		.041 .023 40 .031 .056 .084					.037 .020 66 .027 .064 .082
10				.028 .020 34 .021 .049 .079	.035 .014 8 .031 .051 .059					.029 .019 42 .022 .053 .076
5		.020 1		.027 .018 47 .024 .037 .060						.027 .018 48 .022 .036 .060
0		.019 1	.067 1	.023 .015 41 .017 .036 .062						.023 .016 43 .018 .037 .062
5			.031 .005 3 .030 .035 .038	.021 .011 34 .018 .035 .041						.022 .011 37 .022 .036 .041
10			.037 .010 8 .032 .044 .066	.030 .015 19 .031 .048 .060						.032 .014 25 .032 .048 .054
15			.028 .013 3 .021 .038 .045	.018 .011 22 .016 .025 .036						.017 .012 25 .016 .026 .044
20	.044 .014 5 .041 .056 .069	.049 1	.044 .011 5 .041 .060 .083	.019 .010 13 .023 .027 .036						.031 .017 24 .027 .044 .062
25	.047 .022 15 .038 .056 .102		.085 .018 6 .090 .098 .107	.032 .004 3 .030 .035 .036						.055 .026 24 .042 .088 .111
30		.087 .015 10 .081 .102 .106	.084 .019 12 .089 .099 .107	.030 .021 9 .024 .040 .077						.069 .031 31 .063 .098 .106
35			.070 .028 6 .059 .101 .116	.061 .021 27 .060 .074 .094						.054 .024 33 .051 .077 .106
40			.075 .040 3 .052 .106 .129							.075 .040 3 .052 .106 .129
45S										

LONGITUDE

TABLE II. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
90%	84%	98%

FEBRUARY
FL 330

LAT	15E			60E			105E			150E			165W			120W			75W			30W			15E			MEAN			LAT
70N																273 273	032 294	2 303	130 092	116 314	18 342				162 125	116 311	20 341	70N
65																151 143	045 199	8 236	116 117	039 189	6 166	188 178	041 240	6 241	151 123	051 205	20 241	65
60																105 107	041 143	6 169				185 217	056 236	5 241	141 125	063 223	11 240	60
55										475 475	319 437	2 492										106 094	035 140	8 175	180 096	151 335	10 486	55
50										327 361	130 450	9 467							201 236	072 256	10 286	162 081	143 335	56 421	187 179	144 362	75 466	50
45	095 080	136 155	21 164							217 167	114 362	16 410				199 212	083 267	3 290	189 189	151 312	77 563	085 053	072 136	6 221	116 112	135 400	123 559	45
40	088 149	072 3	14 352				252 286	114 332	16 379	110 107	055 145	48 261	066 054	026 090	29 122	114 068	095 257	33 317	181 209	089 264	16 305				110 067	083 211	156 327	40
35	104 079	091 178	44 227				112 069	109 166	12 360	071 052	004 075	4 075	079 055	078 133	115 318	101 067	093 176	32 374	317		1				069 054	063 151	146 351	35
30	034 106	021 114	9 134	057 055	011 070	19 077				068 050	036 116	25 142	052 027	026 076	96 137	085 085	060 125	2 142							056 047	029 082	150 142	30
25	034 021	046 115	14 149	023 058	030 115	17 183	044 071	011 074	12 055	087 052	055 53	9 187	037 [illegible]	026 081	105 091										045 046	037 076	102 157	25
20				040 [illegible]	012 049	35 072	039 [illegible]	[illegible]	12 106				037 055	042 116	31 134										048 025	032 081	96 222	20
15				038 031	006 044	15 048	[illegible]	[illegible]	6 023																032 036	009 042	21 047	15
10							035 [illegible]	010 [illegible]	10 040																025 030	008 011	10 047	10
5				[illegible]		1	023 [illegible]	[illegible]	11 035	116		1													030 023	6 033	13 067	5
0							020 020	014 025	14 052																040 020	014 025	14 052	0
5							030 031	009 009	16 045	029 034	006 015	5 035													030 032	009 008	21 044	5
10							030 024	007 016	17 064	022 024	004 028	17 039													026 019	014 038	34 063	10
15							040 041	007 008	8 049	026 026	014 042	19 055													030 028	014 045	27 054	15
20	075		1				034 033	002 016	4 037	026 020	020 039	41 080													028 022	020 039	46 079	20
25	048 046	013 066	14 070				038 036	009 039	7 056	048 042	034 094	62 110													047 042	030 076	83 109	25
30				077 083	017 089	8 095	074 075	008 078	3 080	062 062	027 085	88 118													064 066	026 085	99 115	30
35							080 074	025 107	10 125	077 078	030 109	68 123													077 072	029 106	78 126	35
40							044		1	081 077	038 120	34 162													080 076	038 117	35 162	40
45S																															45S

LONGITUDE

TABLE II. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

FEBRUARY
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.391 1	.211 .085 13 .236 .263 361			.219 .086 14 .237 .260 372	70N
65					.419 .067 8 .439 .481 .498	.336 .141 16 .280 .470 .631				.383 .126 24 .340 .475 .613	65
60					.200 .112 13 .182 .266 .457	.406 .150 78 .434 .536 .656				.377 .162 88 .397 .508 .655	60
55				.383 .070 22 .350 .429 .490	.396 .078 33 .390 .496 .563	.372 .152 100 .404 .501 .650	.422 .044 3 .437 .458 .467	.178 1		.375 .130 159 .396 .490 .606	55
50				.442 .169 33 .476 .605 .715	.301 .133 47 .337 .415 .501	.393 .169 84 .423 .559 .682	.267 .098 25 .275 .367 .412	.178 .150 41 .123 .354 .481		.329 .176 230 .316 .510 .677	50
45	.260 .104 35 .271 .342 .385		.442 .042 7 .453 .465 .497	.289 .213 24 .173 .497 .660	.185 .136 56 .107 .289 .529	.337 .163 78 .380 .504 .566	.128 .104 47 .070 .275 .336	.194 .067 4 .194 .261 .271		.240 .169 251 .238 .433 .560	45
40	.273 .131 62 .292 .405 .463		.105 .087 13 .063 .244 .268	.248 .126 19 .281 .376 .423	.201 .157 74 .196 .387 .451	.151 .120 207 .101 .285 .436	.135 .144 8 .069 .155 .454	.065 .012 2 .065 .072 .076		.183 .139 303 .142 .382 .453	40
35	.159 .100 71 .120 .276 .367		.133 .095 33 .082 .253 .329	.143 .084 44 .140 .254 .273	.093 .100 232 .060 .139 .421	.096 .075 43 .067 .171 .272	.227 .168 8 .158 .427 .545			.115 .103 432 .068 .205 .303	35
30	.079 .046 79 .084 .103 .250	.057 .017 19 .054 .073 .098	.061 .011 18 .058 .075 .090	.111 .041 12 .104 .168 .184	.077 .060 403 .063 .108 .286					.077 .056 531 .063 .106 .279	30
25	.060 .012 17 .059 .072 .083	.056 .013 23 .056 .067 .078	.039 .009 23 .036 .043 .081	.065 .001 7 .065 .066 .066	.063 .043 361 .064 .098 .171					.062 .040 431 .064 .093 .169	25
20		.050 .016 16 .042 .066 .077	.048 .017 14 .043 .063 .069	.050 .010 10 .056 .069 .080	.042 .024 67 .041 .067 .092					.044 .022 127 .043 .066 .085	20
15		.042 .005 11 .042 .046 .047	.030 .019 11 .040 .046 .048	.012 .015 39 .003 .032 .039	.027 .020 82 .020 .057 .083					.022 .019 83 .021 .044 .061	15
10		.026 .007 12 .024 .033 .039	.020 .005 9 .018 .025 .029	.030 .007 3 .027 .036 .038	.028 .014 16 .028 .038 .064					.026 .011 40 .020 .036 .064	10
5		.022 .006 4 .020 .028 .033	.020 .003 9 .019 .023 .028	.034 .023 14 .029 .041 .066	.032 .014 14 .037 .048 .050					.029 .017 41 .026 .040 .063	5
0			.024 .019 22 .019 .038 .069	.044 .033 29 .029 .103 .112	.038 .008 4 .038 .042 .043					.036 .028 55 .028 .047 .110	0
5			.022 .009 29 .025 .030 .035	.026 .006 24 .026 .031 .037						.024 .008 53 .025 .031 .038	5
10			.018 .008 19 .018 .022 .033	.021 .008 47 .023 .027 .031						.020 .008 62 .020 .026 .035	10
15			.033 .011 22 .031 .047 .064	.023 .012 75 .021 .033 .066						.026 .012 97 .024 .036 .058	15
20		.028 1	.036 .010 38 .035 .048 .064	.042 .026 80 .034 .072 .103						.040 .022 119 .035 .059 .098	20
25		.027 .008 12 .029 .032 .035	.056 .023 37 .045 .082 .106	.048 .021 88 .049 .064 .089						.049 .022 137 .045 .068 .101	25
30		.031 1	.072 .017 27 .069 .090 .102	.070 .030 77 .072 .089 .124						.070 .027 105 .069 .095 .119	30
35			.080 .038 41 .077 .099 .157	.092 .047 58 .080 .140 .217						.087 .044 99 .080 .121 .222	35
40			.168 .092 11 .108 .278 .306	.080 .031 83 .076 .112 .139						.093 .055 74 .082 .115 .279	40
45S											45S

LONGITUDE

TABLE II. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(e) Flight level 370

CODE	MEAN	ST. DEV.	N
	50%	84%	98%

FEBRUARY
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N							.311 1			.311 1	70N
65					.576 .100 62 .571 .649 786	.546 .091 13 .530 .632 725	.360 .004 2 .360 .362 363	.330 .019 5 .321 .339 .364		.551 .115 62 .555 .646 .736	65
60				.291 .115 17 .295 .430 .468	.530 .141 72 .544 .672 746	.482 .213 38 .525 .703 745		.186 .106 8 .155 .310 332		.466 .191 138 .507 .668 742	60
55				.360 .182 111 .339 .543 710	.401 .193 51 .404 .566 .650	.410 .125 20 .401 .556 607	.460 .029 16 .467 .490 495	.520 .168 69 .576 .660 .702		.419 .183 267 .449 .610 712	55
50				.464 .238 60 .475 .678 .907	.426 .166 46 .442 .550 .837	.439 .084 15 .426 .496 608	.063 .096 112 .034 .037 444	.340 .217 126 .298 .605 .775		.290 .241 359 .246 .566 .802	50
45	.388 1		.218 .006 3 .214 .223 .226	.411 .156 59 .377 .623 .686	.406 .218 68 .390 .654 822	.373 .143 11 .441 .481 503	.078 .107 126 .050 .062 .506	.259 .174 92 .311 .436 .517		.252 .212 360 .133 .476 .699	45
40	.338 .042 49 .344 .353 .398		.343 .159 28 .287 .577 .618	.401 .138 40 .359 .535 664	.239 .163 48 .232 .443 .518	.264 .152 634 .251 .441 .548	.132 .151 64 .038 .342 469	.328 .161 46 .364 .481 .559		.269 .158 909 .264 .445 .576	40
35	.254 .152 65 .274 .440 .456		.266 .074 89 .279 .324 .394	.169 .117 191 .147 .293 .478	.137 .131 280 .062 .308 .487	.162 .120 213 .147 .246 .514	.548 .052 11 .524 .587 .664			.178 .136 849 .134 .319 .509	35
30	.066 .020 36 .060 .090 .119	.049 .007 23 .046 .056 .065	.101 .095 35 .057 .211 .345	.101 .065 287 .078 .153 .250	.174 .133 479 .115 .351 .424	.029 .001 2 .029 .029 .029				.139 .115 862 .065 .301 .406	30
25	.074 1	.060 .007 58 .057 .069 .076	.061 .008 18 .059 .063 .077	.117 .052 108 .087 .201 .226	.095 .064 397 .092 .155 .271					.095 .059 582 .073 .151 .250	25
20		.044 .017 30 .046 .059 .069	.084 .090 5 .040 .123 .246		.084 .063 58 .078 .125 .242	.044 .021 2 .044 .057 .063				.071 .058 95 .055 .104 .243	20
15		.027 .005 17 .026 .031 .035	.011 .014 22 .005 .029 .042		.030 .022 61 .024 .049 .095					.025 .020 100 .019 .038 .093	15
10		.017 .011 3 .011 .026 .032	.016 1	.018 .006 25 .017 .024 .031	.024 .015 40 .021 .033 .069					.022 .012 69 .020 .031 .064	10
5		.019 .005 5 .015 .025 .026		.021 .011 52 .020 .030 .051	.046 .015 5 .038 .061 .070					.023 .013 62 .020 .032 .055	5
0				.020 .010 55 .020 .028 .038	.032 .013 6 .029 .036 .056					.021 .011 63 .023 .031 .039	0
5				.022 .012 61 .022 .032 .045	.038 .008 6 .039 .044 .048					.023 .012 67 .024 .034 .048	5
10			.023 .007 8 .022 .031 .036	.020 .012 41 .015 .030 .046	.054 .014 4 .052 .067 .073					.023 .015 53 .022 .036 .059	10
15			.031 .012 13 .031 .039 .055	.028 .014 17 .025 .046 .052	.085 1					.031 .016 31 .027 .048 .068	15
20	.034 .005 8 .035 .038 .040	.024 .005 3 .024 .028 .030	.049 .013 18 .047 .059 .079	.075 .016 2 .075 .085 .089						.044 .016 31 .041 .056 .086	20
25		.030 .005 18 .030 .034 .042	.047 .010 14 .048 .054 .061	.048 .010 8 .044 .058 .067						.039 .012 38 .029 .053 .063	25
30		.048 .018 9 .042 .045 .085	.091 .049 17 .095 .148 .166	.040 .003 7 .042 .043 .043						.066 .043 33 .043 .124 .160	30
35			.068 .029 32 .084 .118 .153	.097 .055 9 .075 .116 .222						.090 .037 41 .084 .122 .193	35
40			.126 .032 2 .126 .148 .157	.107 .027 3 .102 .129 .140						.118 .030 5 .102 .148 .157	40
45S											45S

LONGITUDE

TABLE II. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

FEBRUARY
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65				.646 .310 2 .646 .856 .943	.630 .184 .105 .618 .796 1.016	.597 .024 2 .597 .612 .619				.630 .186 .109 .618 .797 1.015	65
60				.624 .190 100 .623 .829 .923	.545 .182 69 .516 .716 .920		.516 .025 4 .526 .535 .535	.462 .055 17 .465 .514 .621		.578 .185 .190 .445 .784 .926	60
55				.608 .227 144 .594 .829 1.114	.565 .172 36 .551 .715 .866		.509 .096 13 .534 .603 .624	.472 .082 23 .458 .536 .654		.580 .207 .216 .460 .799 1.046	55
50				.708 .270 67 .784 1.004 1.096	.497 .312 40 .385 .833 1.241		.474 .171 18 .526 .614 .692	.364 .213 78 .448 .573 .727		.504 .280 .193 .463 .817 1.102	50
45	.524 .061 78 .549 .601 .657		.791 .213 14 .850 .973 1.040	.509 .269 73 .427 .794 1.161	.366 .185 59 .351 .841 .821	.366 .102 17 .339 .474 .571	.686 .256 18 .639 .990 1.088	.427 .054 14 .423 .488 .498		.493 .224 .271 .458 .693 1.054	45
40	.499 .069 79 .514 .572 .592		.664 .212 44 .730 .840 .967	.585 .320 226 .507 .762 1.343	.186 .173 25 .096 .343 .626	.274 .198 352 .219 .473 .739	.596 1	.349 .037 14 .347 .385 .424		.409 .275 .741 .386 .634 1.296	40
35			.387 .160 26 .364 .442 .782	.182 .119 135 .140 .316 .465	.147 .133 98 .090 .273 .478	.302 .259 177 .217 .653 .758				.236 .207 .445 .140 .437 .741	35
30			.106 .047 21 .078 .166 .182	.062 .013 9 .057 .065 .092	.129 .103 186 .091 .218 .372	.052 .001 2 .052 .053 .053				.122 .097 .198 .062 .209 .367	30
25			.051 .018 7 .059 .065 .070	.110 .046 16 .096 .167 .188	.081 .062 107 .079 .140 .187					.083 .051 .130 .076 .142 .189	25
20			.017 .013 22 .015 .035 .043		.056 .039 24 .052 .092 .138					.037 .036 46 .016 .081 .135	20
15			.018 .013 31 .012 .037 .043		.024 .016 7 .021 .034 .053					.017 .014 38 .011 .037 .049	15
10			.040 .006 16 .042 .046 .048		.059 .002 2 .058 .060 .061					.043 .008 17 .043 .048 .060	10
5		.040 .011 4 .038 .049 .057	.037 .011 6 .036 .048 .050		.002 .002 4 .001 .003 .006					.028 .019 14 .018 .047 .056	5
0		.039 1			.040 1					.040 .001 2 .040 .040 .040	0
5		.030 1	.024 .004 5 .023 .026 .030	.038 .007 4 .039 .044 .047	.031 .009 4 .031 .040 .040					.030 .008 14 .026 .040 .045	5
10			.012 .007 5 .010 .018 .023	.084 .003 2 .084 .086 .087	.029 .008 6 .026 .034 .045					.026 .016 13 .024 .047 .056	10
15			.016 .006 2 .016 .020 .022		.058 .010 11 .057 .065 .078					.051 .016 13 .053 .064 .078	15
20				0.000 1	.057 .014 15 .053 .072 .083					.054 .019 16 .051 .072 .082	20
25				.013 .018 7 .008 .014 .051	.039 .015 16 .041 .062 .069					.031 .020 23 .033 .052 .058	25
30		.058 .024 11 .044 .089 .093	.093 .005 5 .095 .098 .098	.091 .054 16 .084 .112 .226	.063 1					.079 .044 33 .084 .096 .203	30
35			.086 .027 32 .076 .109 .182	.107 .098 32 .093 .174 .228						.096 .047 64 .071 .141 .204	35
40			.122 1							.122 1	40
45S											45S

LONGITUDE

TABLE II. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

FEBRUARY
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.760 .693 .316 1.174 11 1.288	.747 .752 .015 .759 3 .783				.757 .676 .292 1.116 14 1.284
60				.562 1	.722 .699 .229 .929 20 1.154	.700 .752 .166 .769 22 1.037	.724 .743 .069 .773 6 .816			.709 .746 .186 .866 48 1.145
55				.775 .807 .256 .997 65 1.315		.684 .658 .184 .805 52 1.054	.784 .804 .118 .887 10 .970			.730 .722 .221 .938 127 1.214
50				.847 .610 .244 .907 117 1.148	.494 .476 .087 .567 5 .616	.783 .761 .221 .938 57 1.254	.755 .695 .243 .872 30 1.475	.480 .466 .149 .569 17 .794		.675 .484 .244 .888 226 1.247
45			.589 .606 .172 .749 17 .837	.633 .638 .305 .900 81 1.492	.418 .426 .234 .660 51 .849	.546 .599 .278 .804 95 1.015	.697 .665 .315 .919 19 1.387	.564 .564 .041 .592 2 .603		.556 .573 .285 .805 245 1.167
40	.378 .307 .178 .648 13 .716		.419 .406 .195 .599 91 .828	.411 .514 .197 .553 66 .692	.453 .466 .196 .630 121 .833	.364 .259 .248 .633 61 .955	.286 .266 .065 .329 2 .347	.426 .362 .112 .569 9 .603		.418 .447 .205 .607 363 .840
35	.349 .385 .184 .606 64 .792		.283 .300 .115 .369 72 .541	.157 .154 .027 .188 8 .197	.272 .165 .206 .519 40 .706	.163 .163 .006 .167 2 .169				.300 .297 .167 .459 186 .702
30	.103 .084 .069 .109 30 .336		.102 .082 .060 .142 5 .206		.061 .044 .068 .122 28 .215	.098 1				.086 .078 .070 .121 61 .322
25	.063 .063 .008 .068 2 .071				.035 .046 .025 .060 18 .082	.092 .092 .008 .097 5 .100				.049 .055 .031 .086 25 .098
20			.048 .044 .026 .063 8 .091		.014 .006 .015 .036 12 .038					.027 .012 .025 .050 20 .083
15			.035 .033 .020 .050 12 .071		.018 .016 .012 .032 8 .035					.028 .018 .019 .060 20 .067
10	.050 1		.039 .041 .018 .061 11 .068		.008 .008 .002 .010 5 .010					.030 .029 .019 .049 17 .066
5		.042 .042 .008 .048 2 .047	.033 .032 .006 .037 7 .042							.035 .036 .006 .041 9 .046
0										
5										
10										
15										
20										
25										
30				.074 .056 .038 .105 8 .164	.074 1					.074 .065 .036 .100 10 .153
35				.183 .190 .058 .211 27 .236						.183 .190 .058 .211 27 .236
40										
45S										

LONGITUDE

TABLE II. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(h) Flight level 430

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

FEBRUARY
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55										
50				1.009 .354 6 1.170 1.330 1.339			735 .117 7 764 .839 .644			662 290 13 625 1 276 1 337
45			.798 .278 10 .904 .993 1.191	.751 .353 30 .736 1.195 1.377			.742 .059 6 .746 .791 .831			.760 .315 46 .724 1.035 1 376
40			.591 .195 53 .573 .812 .927		.213 .188 12 .157 .215 .698					.521 .243 65 .553 .805 .916
35			.578 .305 7 .447 .684 1.187		.594 .066 10 .566 .666 .710					.587 .202 17 .563 .665 1 086
30			.052 .017 24 .044 .074 .081		.311 .103 8 .309 .402 .460					.117 .124 32 .057 .262 .429
25			.040 .017 29 .031 .061 .070							.040 .017 29 .031 .061 .070
20			.028 .013 6 .025 .038 .050							.028 .013 6 .025 .038 .050
15			.020 .007 2 .020 .024 .026							.020 .007 2 .020 .024 .026
10			.023 .006 6 .024 .029 .030							.023 .006 6 .024 .029 .030
5			.031 .002 7 .031 .032 .035							.031 .002 7 .031 .032 .035
0										
5										
10										
15										
20										
25										
30										
35				.188 .028 10 .186 .199 .201						.188 .028 10 .186 .199 .201
40										
45S										

LONGITUDE

TABLE III. - GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60						.162 .053 11 .156 .216 .245	.254 .107 29 .266 .336 .501	.286 .112 11 .340 .372 .391		.241 .108 51 .250 .347 .487	60
55						.156 .103 6 .150 .264 .271		.202 .090 22 .215 .269 .303		.192 .085 28 .213 .269 .381	55
50						.056 .013 14 .056 .063 .083	.099 .053 17 .073 .153 .210	.101 .100 26 .073 .117 .438		.089 .076 57 .064 .117 .402	50
45	.055 .011 4 .050 .062 .072				.137 1	.008 1	.176 .101 8 .160 .271 .350	.053 1		.122 .097 15 .085 .212 .339	45
40	.070 .022 21 .057 .096 .109		.060 .020 6 .050 .074 .088	.049 1	.003 1	.079 .086 17 .055 .078 .324	.136 .106 12 .076 .282 .344	.043 1		.083 .074 59 .057 .099 .348	40
35	.095 .064 15 .082 .171 .229		.114 .082 12 .063 .185 .269	.172 1	.050 .021 13 .043 .057 .103	.114 .096 10 .076 .187 .333	.090 .102 7 .041 .105 .306			.092 .078 56 .054 .166 .331	35
30	.058 .006 4 .059 .064 .069	.058 .006 4 .057 .063 .066	.081 .016 12 .057 .070 .097		.071 .030 13 .063 .093 .134	.084 .068 10 .058 .173 .231	.036 .001 3 .036 .037 .038			.070 .041 46 .056 .092 .166	30
25		.052 .002 3 .051 .053 .054	.026 .014 14 .022 .046 .060		.084 .030 13 .067 .102 .140	.037 .006 7 .036 .038 .048	.040 .000 3 .040 .041 .041			.050 .031 40 .042 .087 .114	25
20			.030 .005 3 .026 .033 .037		.057 .019 9 .056 .069 .094	.026 .007 4 .023 .031 .036				.044 .021 16 .033 .059 .090	20
15		.062 1	.059 .017 5 .069 .073 .073							.059 .015 6 .050 .073 .073	15
10											10
5						.038 1				.035 1	5
0											0
5											5
10											10
15											15
20	.013 1	.027 1					.017 1			.019 .006 3 .017 .024 .027	20
25	.043 1									.043 1	25
30			.025 1							.025 1	30
35			.039 .005 8 .038 .043 .047	.066 1						.041 .007 7 .040 .048 .054	35
40											40
45S											45S

LONGITUDE

TABLE III. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N								.216 .278 .121 .316 8 .364		.216 .278 .121 .316 8 .364
65								.168 .173 .074 .248 12 .260		.168 .173 .074 .248 12 .260
60								.152 .166 .069 .225 12 .237		.152 .166 .069 .225 12 .237
55						.387 .378 .052 .431 4 .461		.146 .102 .125 .303 16 .417		.194 .118 .149 .374 20 .454
50					.341 .405 .137 .440 8 .444	.145 .103 .100 .226 4 .301		.190 .126 .139 .410 26 .441		.217 .170 .150 .413 38 .445
45	.107 .107 .038 .132 2 .143			.114 .120 .029 .144 8 .145	.095 .073 .118 .097 10 .377	.173 .116 .129 .326 27 .433	.239 .166 .193 .465 18 .534			.173 .098 .152 .409 62 .491
40	.090 .054 .063 .134 6 .211		.186 .166 .005 .188 2 .171	.207 .186 .072 .284 11 .333	.084 .030 .137 .162 10 .416	.074 .061 .085 .089 83 .419	.130 .074 .131 .195 8 .414			.094 .055 .100 .166 120 .445
35	.137 .061 .122 .266 8 .348		.119 .079 .105 .159 14 .391	.203 .203 .021 .217 2 .223	.140 .066 .177 .220 13 .561	.103 .061 .103 .215 7 .295				.129 .044 .133 .226 42 .479
30		.060 .049 .003 .052 3 .054	.086 .090 .010 .094 10 .099		.040 1	.028 .020 .018 .023 7 .064				.058 .070 .030 .093 21 .096
25		.058 .058 .009 .064 2 .067	.072 .060 .021 .084 9 .108		.082 .064 .069 .137 17 .238	.055 1				.077 .060 .055 .094 29 .232
20		.049 .047 .011 .059 3 .063	.048 .038 .019 .066 11 .083		.068 .059 .022 .095 13 .107	.011 .011 .002 .013 9 .013				.046 .030 .028 .073 36 .104
15		.032 .027 .013 .038 10 .062	.038 .035 .018 .058 10 .070			.049 .061 .022 .063 4 .064				.037 .026 .018 .062 24 .069
10							.038 .038 .005 .041 2 .043			.038 .038 .005 .041 2 .043
5										
0										
5										
10										
15										
20	.033 .035 .009 .039 8 .043						.065 1			.037 .036 .014 .044 7 .062
25	.050 .051 .008 .058 16 .060									.050 .051 .008 .058 16 .060
30										
35			.050 1	.058 .057 .017 .069 10 .094						.058 .057 .017 .067 11 .094
40			.034 1							.034 1
45S										

LONGITUDE

TABLE III. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N							.116 1	.247 .136 8 .224 .386 .428		.233 .135 9 .182 .382 .427	70N
65						.287 .086 8 .255 .360 .447	.494 .045 15 .496 .535 .563	.402 .049 4 .422 .442 .442		.419 .110 27 .465 .529 .551	65
60						.417 .109 29 .433 .627 .569	.304 .223 16 .226 .577 .629	.310 .146 23 .340 .471 .500		.354 .162 68 .313 .519 .604	60
55					.456 .066 7 .473 .513 .517	.339 .150 23 .374 .609 .573	.215 .155 63 .178 .381 .567	.169 .151 80 .084 .351 .508		.220 .167 173 .169 .419 .573	55
50				.079 .046 10 .062 .109 .185	.266 .161 15 .226 .451 .544	.244 .141 9 .182 .429 .447	.128 .131 123 .076 .217 .493	.186 .180 121 .104 .423 .634		.167 .161 278 .065 .364 .588	50
45	.234 .105 7 .179 .354 .386			.131 .119 37 .083 .323 .362	.276 .211 14 .150 .525 .591	.219 .125 18 .230 .305 .459	.123 .119 155 .064 .210 .484	.139 .073 18 .131 .221 .281		.143 .131 246 .075 .265 .496	45
40	.182 .077 22 .147 .224 .356		.053 .005 8 .053 .067 .080	.186 .136 21 .106 .248 .470	.096 .072 20 .074 .094 .309	.123 .101 84 .073 .244 .352	.250 .172 36 .241 .444 .643	.114 1		.150 .127 188 .079 .275 .490	40
35	.178 .119 28 .203 .327 .361		.206 .186 15 .097 .411 .583	.527 1	.111 .119 91 .074 .191 .532	.128 .116 93 .081 .166 .478				.137 .130 168 .078 .248 .567	35
30	.097 .061 10 .069 .127 .242	.067 .018 17 .066 .071 .106	.182 .012 3 .164 .172 .176		.074 .034 71 .059 .100 .172	.051 .015 22 .049 .069 .076	.213 .053 2 .213 .249 .264			.075 .041 125 .061 .100 .185	30
25		.074 .014 3 .070 .066 .091			.081 .063 53 .064 .132 .261	.037 .010 14 .036 .046 .057	.060 .026 5 .044 .091 .093			.071 .057 78 .055 .099 .233	25
20		.056 .015 2 .056 .066 .070	.036 .017 8 .041 .049 .067	.065 .029 30 .061 .088 .134	.073 .040 29 .069 .110 .162	.041 .016 18 .040 .055 .066				.060 .033 87 .054 .084 .150	20
15		.012 .002 4 .012 .014 .014	.036 .018 19 .043 .051 .063	.039 .018 26 .034 .061 .070	.035 .002 6 .035 .036 .037	.043 .024 16 .044 .064 .065	.046 .004 3 .046 .049 .051			.037 .019 74 .035 .059 .077	15
10		.045 .002 4 .046 .047 .047	.040 .012 11 .038 .054 .060	.031 .000 4 .031 .032 .032	.031 .002 3 .031 .032 .033		.050 .004 6 .049 .054 .057			.041 .010 28 .034 .051 .059	10
5			.027 .002 4 .027 .029 .030	.031 .003 4 .031 .034 .036		.034 .003 2 .034 .035 .036	.040 .008 9 .039 .046 .055			.035 .006 19 .032 .043 .053	5
0			.029 .002 7 .028 .032 .032	.027 .003 6 .027 .029 .030			.023 .012 8 .024 .032 .043			.026 .008 21 .027 .032 .040	0
5			.038 .005 8 .036 .044 .045	.026 .007 7 .024 .028 .038			.026 .004 3 .026 .029 .030			.030 .008 15 .028 .038 .044	5
10			.043 .018 2 .043 .055 .060	.025 .010 5 .024 .032 .042						.030 .015 7 .025 .045 .059	10
15				.033 .005 5 .031 .037 .040						.033 .005 5 .031 .037 .040	15
20	.025 .016 6 .018 .046 .049	.046 .009 2 .046 .081 .084		.026 .002 6 .026 .027 .027						.028 .013 14 .023 .044 .053	20
25	.015 .006 10 .017 .023 .026	.042 .007 14 .044 .047 .064		.041 .016 8 .035 .062 .068						.033 .016 32 .030 .046 .067	25
30		.045 .008 21 .044 .050 .064	.046 .012 4 .045 .055 .062	.072 1						.046 .010 26 .044 .052 .071	30
35			.061 .010 3 .057 .059 .060	.119 .046 25 .123 .174 .188						.112 .050 26 .115 .172 .188	35
40			.046 .006 2 .046 .050 .053	.062 .063 7 .051 .112 .213						.074 .056 9 .051 .095 .208	40
45S											45S

LONGITUDE

TABLE III. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.597 .056 13 .593 .649 .686				.597 .056 13 .593 .649 .686	70N
65					.516 .035 8 .516 .554 .563	.570 .074 18 .570 .655 .661	.481 .021 7 .474 .512 .514			.536 .068 31 .521 .600 .659	65
60				.177 .111 4 .166 .265 .319		.476 .131 42 .503 .599 .675	.345 .146 15 .377 .485 .535	.298 .109 17 .266 .415 .456		.396 .158 78 .372 .568 .666	60
55				.378 .169 35 .392 .557 .683	.641 .062 25 .643 .706 .761	.398 .211 38 .463 .637 .680	.304 .226 24 .198 .638 .714	.280 .228 72 .216 .624 .744		.372 .234 195 .395 .642 .730	55
50				.488 .149 32 .473 .621 .644	.298 .102 14 .279 .407 .462	.289 .194 44 .211 .509 .606	.125 .126 58 .058 .252 .485	.158 .141 39 .087 .284 .568		.247 .201 187 .192 .479 .671	50
45	.271 .156 16 .298 .416 .492		.549 .009 2 .549 .554 .557	.327 .223 44 .318 .591 .718	.208 .191 33 .113 .442 .644	.369 .195 84 .396 .596 .677	.211 .195 54 .100 .483 .551	.388 .149 5 .420 .536 .581		.296 .210 238 .166 .520 .665	45
40	.230 .178 23 .148 .429 .528		.544 .119 27 .575 .644 .727	.286 .207 20 .236 .555 .585	.115 .082 102 .078 .224 .278	.168 .141 236 .103 .288 .545	.240 .193 3 .158 .395 .492	.263 .047 4 .244 .303 .335		.190 .169 415 .113 .380 .619	40
35	.244 .137 33 .183 .387 .452		.243 .203 18 .150 .457 .638	.150 .056 3 .160 .195 .210	.180 .159 223 .094 .273 .618	.146 .119 23 .100 .205 .501				.173 .156 300 .107 .354 .620	35
30	.157 .064 21 .147 .209 .299	.098 .066 42 .087 .171 .262	.050 .031 17 .033 .069 .099	.055 .012 11 .054 .066 .070	.105 .068 281 .085 .158 .272	.038 .028 18 .033 .069 .075				.100 .067 390 .079 .159 .271	30
25		.064 .016 40 .083 .071 .090	.060 .005 2 .060 .063 .065	.068 .007 8 .068 .072 .073	.091 .047 189 .084 .132 .207	.035 .017 18 .042 .048 .056	.032 .001 3 .032 .033 .033			.080 .045 257 .072 .121 .200	25
20		.055 .017 20 .055 .069 .086	.032 .003 4 .032 .035 .037	.077 .018 4 .070 .069 .106	.087 .056 33 .070 .182 .201	.027 .014 9 .024 .043 .046				.066 .046 70 .049 .093 .196	20
15		.014 .015 4 .009 .027 .036	.034 .020 43 .029 .056 .066	.054 .034 46 .043 .108 .111		.039 .009 12 .037 .051 .054				.042 .026 104 .035 .059 .110	15
10		.041 .002 5 .041 .042 .044	.033 .003 8 .033 .035 .038			.032 .005 12 .032 .038 .040	.037 .008 8 .039 .045 .047			.035 .006 33 .035 .041 .046	10
5							.036 .004 6 .035 .041 .042			.036 .004 6 .035 .041 .042	5
0							.040 .005 5 .038 .044 .048			.040 .005 5 .038 .044 .048	0
5							.031 .006 8 .030 .036 .040			.031 .006 8 .030 .036 .040	5
10							.032 .013 14 .035 .042 .054			.032 .013 14 .035 .042 .054	10
15							.050 .009 14 .049 .058 .067			.050 .009 14 .049 .058 .067	15
20			.066 1				.047 .022 5 .042 .066 .083			.051 .021 6 .048 .070 .084	20
25		.043 .028 9 .041 .059 .096	.068 .005 5 .068 .072 .076							.052 .026 14 .047 .069 .096	25
30		.183 1	.091 .011 6 .092 .103 .106							.100 .024 7 .094 .108 .147	30
35			.065 .050 10 .045 .084 .184							.065 .050 10 .045 .084 .184	35
40			.029 .001 2 .029 .030 .030	.251 .031 11 .256 .281 .294						.217 .065 13 .251 .275 .294	40
45S											45S

LONGITUDE

TABLE III. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.693 .693 .066 .739 2 .758				.693 .693 .066 .739 2 .758	70N
65				.288 .275 .097 .368 3 .407	.565 .574 .088 .636 58 .701	.628 .645 .114 .696 17 .803	.627 .627 .007 .631 2 .633			.569 .576 .113 .659 80 .717	65
60				.355 .351 .213 .617 11 .697	.543 .566 .123 .658 52 .722	.576 .586 .135 .682 45 .864	.377 .339 .191 .566 22 .618	.447 .490 .130 .577 17 .636		.503 .546 .168 .652 147 .766	60
55				.518 .523 .150 .661 68 .810	.649 .673 .091 .726 35 .761	.548 .597 .156 .688 32 .764	.378 .307 .205 .611 28 .695	.360 .413 .210 .550 73 .705		.468 .373 .201 .663 226 .775	55
50				.466 .427 .243 .710 35 .919	.420 .481 .194 .634 57 .719	.527 .564 .167 .653 20 .761	.196 .061 .230 .503 138 .825	.333 .350 .202 .560 357 .757		.324 .310 .226 .580 607 .766	50
45	.518 .505 .113 .623 24 .760		.610 .610 .055 .647 2 .663	.457 .553 .225 .660 30 .729	.359 .333 .248 .643 83 .760	.409 .364 .229 .674 47 .690	.095 .042 .148 .578 95 .585	.586 .635 .279 .712 17 1.169		.320 .153 .265 .635 298 .803	45
40	.543 .528 .094 .644 7 .661		.493 .500 .137 .650 14 .664	.334 .308 .224 .604 80 .680	.249 .183 .185 .445 79 .644	.348 .370 .191 .549 685 .680	.090 .039 .095 .215 24 .315	.493 .505 .033 .520 3 .526		.335 .346 .198 .548 872 .673	40
35	.389 .447 .135 .480 11 .490		.345 .308 .188 .572 29 .695	.237 .154 .198 .534 43 .683	.193 .097 .203 .339 225 .788	.294 .268 .182 .510 384 .652				.261 .159 .197 .501 692 .710	35
30	.181 .130 .131 .226 11 .501	.068 .056 .020 .095 57 .119	.118 .111 .024 .145 8 .154	.076 .074 .020 .099 13 .108	.122 .096 .103 .178 603 .468	.104 .073 .090 .148 32 .315				.116 .091 .099 .155 732 .462	30
25		.073 .071 .016 .085 63 .105	.091 .095 .015 .100 7 .103	.078 .079 .016 .089 5 .100	.092 .084 .058 .116 436 .274	.065 .064 .002 .067 19 .069	.041 1			.088 .080 .054 .109 533 .262	25
20		.048 .045 .027 .080 79 .092	.029 .026 .021 .051 8 .069	.048 .032 .028 .085 19 .089	.086 .090 .034 .116 52 .120	.052 .052 .009 .057 2 .060	.034 .034 .005 .037 2 .038			.059 .057 .035 .091 162 .118	20
15		.022 .023 .014 .030 22 .056	.046 .055 .022 .066 25 .080	.029 .029 .005 .034 17 .036		.032 .032 .004 .034 2 .035				.033 .028 .019 .059 66 .075	15
10						.033 .032 .006 .039 14 .042	.030 .030 .008 .037 7 .043			.032 .032 .007 .039 21 .043	10
5											5
0							.026 .025 .005 .030 5 .035			.026 .025 .005 .030 5 .035	0
5							.042 .035 .013 .058 11 .062			.042 .035 .013 .058 11 .062	5
10			.046 .051 .011 .052 6 .055				.043 .039 .010 .050 13 .063			.043 .043 .011 .052 18 .063	10
15			.054 .056 .006 .060 13 .063				.048 .040 .015 .067 11 .069			.052 .050 .012 .062 24 .069	15
20			.051 .053 .012 .060 11 .062				.042 .038 .012 .054 6 .062			.048 .052 .013 .060 17 .063	20
25			.062 .062 .002 .064 5 .065							.062 .062 .002 .064 5 .065	25
30		.073 .083 .030 .108 19 .127	.070 .058 .020 .091 10 .129							.072 .062 .029 .107 29 .134	30
35			.065 .058 .024 .086 17 .117							.065 .058 .024 .086 17 .117	35
40			.096 .095 .019 .108 2 .113							.095 .095 .019 .108 2 .113	40
45S											45S

LONGITUDE

TABLE III. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65				.844 .844 .000 .844 2 .844	.711 .741 .125 .826 52 .910					.716 .744 .126 .836 54 .909
60				.695 .703 .124 .805 66 .900	.651 .630 .169 .800 59 1.099	.644 .699 .154 .781 32 .885	.377 .371 .025 .396 21 .437			.634 .643 .170 .795 178 .933
55				.632 .633 .152 .785 119 .935	.599 .635 .143 .729 39 .791	.614 .563 .124 .771 33 .860	.361 .333 .098 .473 70 .601	.541 .520 .098 .656 27 .748		.551 .543 .172 .719 288 .873
50				.571 .610 .255 .776 122 1.041	.461 .404 .263 .721 42 .984	.674 .560 .202 .947 18 1.016	.178 .136 .185 .250 106 .826	.382 .396 .108 .519 45 .551		.412 .407 .279 .716 333 .992
45	.184 .225 .105 .278 14 .329		.644 .716 .198 .792 21 .923	.543 .613 .227 .753 95 .843	.383 .446 .209 .597 59 .683	.680 .682 .193 .868 68 1.004	.159 .137 .133 .222 190 .597	.293 1		.369 .212 .276 .689 456 .922
40	.079 .074 .048 .088 23 .210		.472 .457 .256 .756 93 .873	.402 .450 .236 .631 43 .798	.209 .105 .196 .462 55 .649	.432 .468 .202 .616 687 .786	.128 .030 .191 .509 26 .532			.404 .455 .226 .624 927 .802
35	.063 .063 .005 .066 2 .067		.110 .065 .102 .127 9 .350	.156 .146 .061 .225 15 .243	.328 .326 .202 .531 96 .684	.357 .312 .241 .655 354 .734				.339 .226 .233 .629 476 .729
30			.015 .014 .004 .019 4 .021		.171 .131 .136 .262 359 .599	.206 .076 .230 .631 47 .652				.174 .124 .150 .277 410 .650
25	.157 1		.023 .014 .016 .048 20 .054		.099 .084 .062 .180 286 .268	.078 .076 .039 .094 26 .191				.093 .081 .062 .157 333 .264
20			.037 .026 .023 .073 14 .076	.092 .092 .003 .094 5 .097	.088 .091 .018 .105 25 .109	.075 .094 .033 .099 16 .102				.073 .074 .031 .099 60 .106
15			.049 .045 .018 .070 10 .079	.032 .032 .003 .036 8 .037						.041 .033 .016 .060 18 .078
10			.036 .035 .006 .040 3 .045			.032 1				.035 .034 .005 .038 6 .045
5			.028 .028 .002 .029 6 .029			.043 .043 .003 .045 2 .046	.034 .033 .005 .036 6 .044			.032 .030 .006 .039 14 .046
0			.030 .029 .005 .033 6 .039				.049 .044 .014 .063 8 .074			.041 .035 .014 .054 14 .073
5			.044 .049 .008 .049 4 .049				.058 .060 .012 .067 6 .075			.053 .045 .012 .063 10 .074
10			.040 .040 .001 .041 2 .041							.040 .040 .001 .041 2 .041
15										
20										
25										
30										
35			.060 .058 .008 .067 7 .075							.060 .058 .008 .067 7 .075
40										
45S										

LONGITUDE

TABLE III. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60					.560 1	.838 .261 9 .794 1.133 1.329			.961 .106 6 .966 1.074 1.086	.868 .227 16 .737 1.061 1.316	60
55				.737 .132 6 .729 .883 .936		.729 .174 15 .726 .912 1.011	.616 .127 11 .585 .720 .884		.964 .136 9 .939 1.126 1.157	.751 .190 43 .740 .940 1.140	55
50				.679 .235 11 .647 .930 .953		.719 .126 15 .759 .856 .883	.411 .085 9 .445 .489 .519			.627 .206 35 .607 .864 .940	50
45	.325 .086 7 .323 .411 .441		.660 .333 2 .660 .886 .978	.676 .054 5 .656 .706 .773		.636 .126 17 .622 .771 .815	.405 .049 3 .422 .444 .453		.561 .181 6 .583 .733 .801	.559 .187 42 .522 .741 .849	45
40	.437 .315 12 .300 .805 .835		1.039 .443 5 1.348 1.404 1.476		.234 .181 20 .165 .369 .636	.468 .201 130 .445 .697 .795			.814 .198 6 .859 .977 1.009	.471 .261 175 .431 .722 .999	40
35	.580 .260 6 .627 .783 .932		.667 .071 2 .667 .735 .755		.698 1	.264 .211 36 .152 .550 .673				.334 .255 45 .232 .615 .786	35
30	.184 .078 6 .145 .267 .318					.090 .016 3 .085 .103 .110				.153 .078 9 .129 .224 .313	30
25											25
20											20
15											15
10											10
5											5
0											0
5											5
10											10
15											15
20											20
25											25
30											30
35											35
40											40
45S											45S

LONGITUDE

TABLE III. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 430

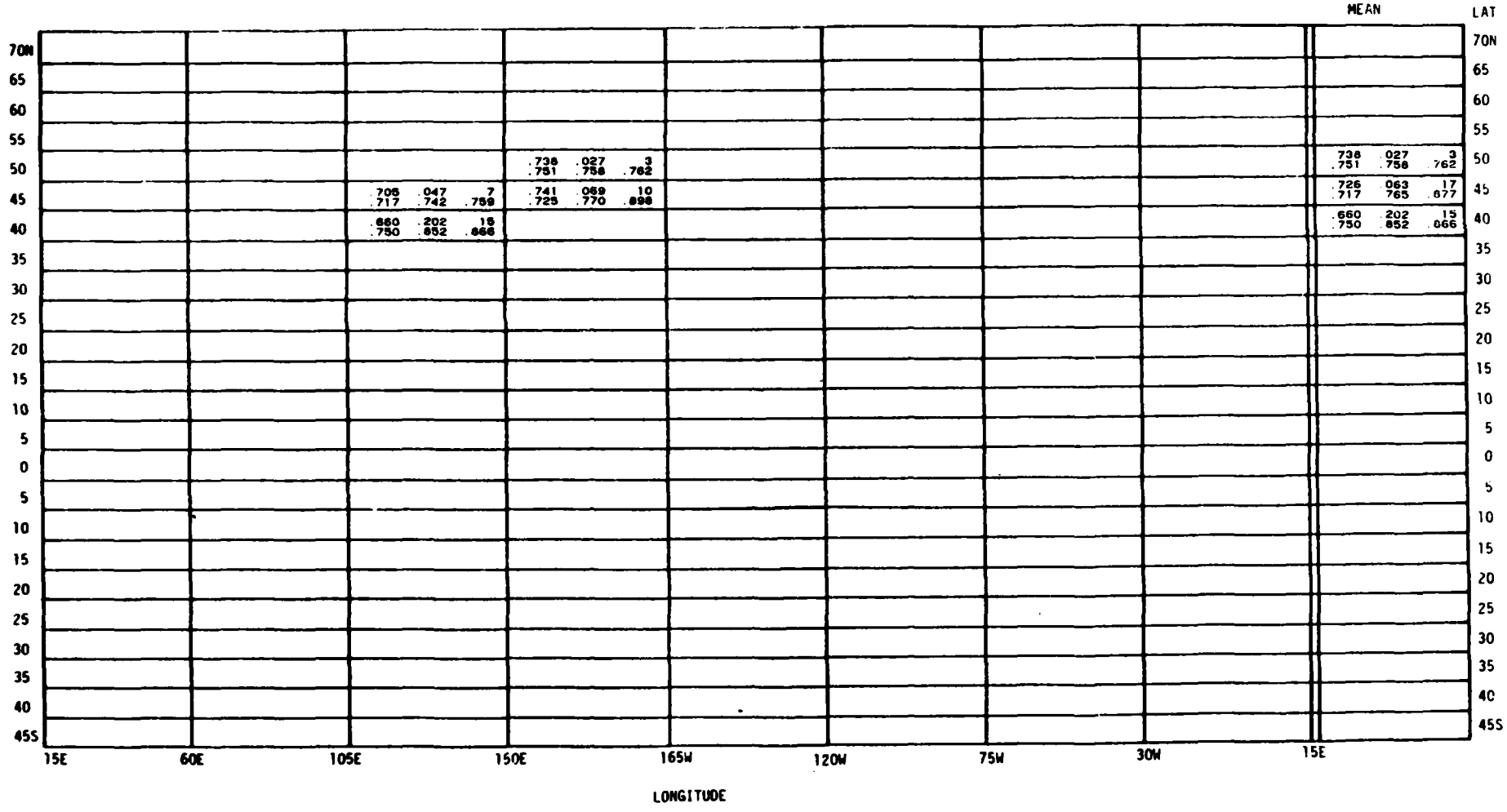


TABLE IV. - GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(a) Flight level 290

CONE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.112 1					.112 1
60										
55								.191 .107 7 .224 .319 .324		.191 .107 7 .224 .319 .324
50						.150 .059 2 .180 .190 .207	.093 .081 13 .060 .108 .297	.089 .077 27 .061 .094 .336		.093 .078 42 .061 103 .327
45	.110 .112 17 .045 .269 .331				.128 .095 12 .080 .249 .310	.463 1	.122 .078 17 .089 .183 .317	.054 .005 4 .053 .059 .061		.121 .105 51 .079 .231 .376
40	.096 .063 35 .065 .182 .243			.041 .002 2 .041 .042 .043	.071 .053 19 .083 .072 .218	.083 .105 29 .087 .088 .457	.092 .020 11 .074 .104 .122			.085 .074 95 .064 .109 .301
35	.071 .030 9 .062 .088 .138		.050 .026 26 .087 .062 .107	.017 .003 2 .017 .018 .019	.065 .030 23 .071 .090 .121	.103 .054 6 .080 .170 .181				.062 .035 66 .036 .090 .161
30	.057 .017 6 .060 .078 .063				.059 .021 21 .067 .077 .065	.076 .006 8 .075 .082 .067				.063 .019 35 .071 .077 .089
25		.048 1			.071 .013 17 .073 .082 .090	.075 .008 4 .071 .081 .088				.070 .013 22 .070 .084 .090
20		.042 .011 7 .041 .049 .060			.072 .036 24 .071 .098 .154					.065 .037 31 .061 .095 151
15		.067 .033 4 .056 .081 .100	.011 .005 5 .010 .016 .019		.030 .021 12 .016 .062 .067	.041 1				.031 .026 22 .015 .060 .066
10		.025 .007 3 .023 .030 .034		.016 .002 5 .017 .017 .018	.014 .003 3 .013 .016 .018		.064 .033 2 .064 .088 .096			.025 .022 13 .018 .031 .082
5		.024 .003 4 .023 .026 .028		.019 0.000 2 .019 .019 .019		.061 .005 2 .061 .054 .056	.032 .002 5 .032 .034 .036			.030 .010 13 .030 .037 .053
0			.021 0.000 2 .021 .021 .021							.021 0.000 2 .021 .021 .021
5			.022 .004 7 .021 .026 .029							.022 .004 7 .021 .026 .029
10			.025 .005 6 .025 .031 .033							.025 .005 6 .025 .031 .033
15			.027 .001 6 .027 .027 .028	.008 1						.024 .007 7 .026 .027 .028
20			.026 .004 7 .027 .031 .034	.023 .009 6 .021 .026 .039			.031 1			.026 .007 14 .025 .031 .039
25			.037 .006 6 .036 .040 .047	.042 .013 19 .042 .058 .062						.041 .012 25 .038 .054 .062
30			.035 1	.036 .010 38 .037 .045 .056						.036 .010 39 .037 .045 .056
35			.033 1	.047 .051 8 .027 .041 .167						.046 .049 10 .030 .040 164
40				.026 1						.025 1
45S										

LONGITUDE

TABLE IV. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60				.142 .009 7 .139 .142 .169	.113 1			.066 .008 4 .064 .072 .076		.114 .036 12 .136 .141 .157	60
55				.131 .035 7 .126 .170 .184	.146 .131 18 .113 .354 .366	.074 .010 4 .078 .080 .082		.156 .126 14 .066 .326 .404		.140 .113 41 .097 .302 .379	55
50				.106 .016 8 .104 .124 .132	.132 .128 27 .082 .335 .357	.145 .027 2 .145 .163 .170	.292 .008 2 .292 .297 .300	.149 .128 8 .072 .318 .373		.138 .114 47 .093 .317 .364	50
45	.050 .006 2 .050 .054 .058		.023 .002 4 .024 .025 .025	.074 .043 3 .049 .107 .131	.084 .056 36 .083 .114 .280	.097 .041 24 .085 .116 .204	.274 .181 8 .228 .393 .603			.099 .088 75 .084 .124 .305	45
40	.153 .063 10 .159 .221 .223		.030 .007 7 .029 .031 .045		.046 .030 22 .035 .076 .103	.122 .105 73 .084 .215 .447	.095 .067 8 .070 .126 .226			.104 .094 118 .077 .190 .397	40
35	.118 .074 13 .091 .212 .266		.056 .054 23 .045 .079 .208	.020 1	.076 .047 28 .070 .084 .201	.097 .078 6 .065 .140 .239				.078 .062 70 .040 .105 .272	35
30	.049 .010 13 .049 .059 .067	.069 .024 18 .068 .081 .125			.078 .011 15 .075 .092 .094	.109 .014 8 .110 .125 .126				.073 .025 52 .060 .095 .126	30
25	.041 .009 14 .039 .041 .063	.066 .033 14 .047 .112 .129	.067 .039 3 .060 .096 .099		.070 .021 15 .076 .093 .096					.060 .027 46 .044 .093 .121	25
20		.038 .011 21 .040 .048 .058	.052 .010 3 .060 .060 .064	.024 .028 8 .014 .015 .087	.069 .042 36 .064 .104 .151					.054 .037 68 .030 .087 .114	20
15		.040 .010 15 .042 .047 .057	.037 .023 7 .051 .059 .062		.037 .015 18 .042 .053 .055	.038 .002 3 .039 .040 .040				.038 .015 43 .042 .053 .059	15
10		.029 .007 11 .027 .036 .039	.053 .006 8 .052 .059 .062	.017 .002 12 .017 .018 .020	.020 .006 3 .018 .025 .028		.027 .005 4 .029 .030 .031			.027 .013 35 .025 .039 .059	10
5		.023 .009 10 .022 .031 .041	.052 .001 2 .052 .053 .053	.016 .005 13 .016 .020 .021			.031 1			.022 .012 26 .018 .031 .052	5
0			.027 .005 3 .025 .030 .033	.015 .006 16 .016 .019 .021			.033 .004 5 .032 .036 .039			.020 .009 24 .017 .031 .037	0
5			.026 .006 16 .024 .031 .035	.017 .005 12 .017 .023 .026			.031 .005 5 .032 .034 .037			.023 .007 33 .022 .031 .036	5
10			.027 .004 14 .029 .032 .032	.017 .007 11 .016 .024 .027			.033 .004 6 .033 .035 .038			.025 .008 31 .026 .032 .036	10
15			.037 .007 8 .037 .043 .046	.017 .005 12 .016 .023 .024			.031 .003 7 .031 .032 .036			.025 .010 24 .021 .034 .044	15
20			.035 .006 2 .035 .038 .040	.019 1			.039 1			.032 .009 4 .034 .040 .040	20
25			.032 .005 15 .032 .035 .041							.032 .005 15 .032 .035 .041	25
30			.036 .006 15 .034 .044 .047	.039 .017 10 .047 .053 .053						.037 .012 25 .035 .048 .053	30
35			.031 .012 26 .030 .039 .061	.032 .010 15 .031 .046 .051						.032 .011 41 .030 .044 .055	35
40			.026 0.000 2 .026 .026 .026	.029 .006 10 .029 .034 .038						.029 .004 12 .027 .033 .038	40
45S											45S

LONGITUDE

TABLE IV. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65						.434 1	.211 .139 .137 .338 12 .481	.120 .108 .091 .182 10 .228		.181 .120 .126 .298 23 .473	65
60						.223 .223 .110 .322 17 .440	.307 .276 .080 .371 9 .489	.160 .116 .106 .273 28 .400		.204 .139 .118 .342 54 .454	60
55				.320 .217 .193 .662 22 .823	.089 .023 .168 .088 10 .500	.384 .365 .175 .572 18 .600	.090 .076 .086 .094 18 .285	.2um .103 .175 .460 58 .978		.223 .099 .190 .483 126 .605	55
50				.498 .613 .220 .659 8 .680		.178 .108 .117 .323 14 .336	.231 .113 .171 .455 29 .533	.121 .083 .116 .186 21 .440		.222 .107 .192 .454 73 .655	50
45	.070 .041 .081 .048 8 .252			.047 .029 .043 .094 22 .158	.176 .076 .172 .443 17 .490	.297 .238 .181 .464 23 .656	.251 .143 .222 .550 46 .703	.131 .081 .083 .196 3 .241		.189 .096 .194 .438 119 .665	45
40	.168 .100 .135 .303 28 .437		.068 .068 .022 .065 14 .113	.083 .056 .081 .121 36 .173	.132 .083 .101 .248 30 .346	.233 .112 .209 .513 61 .649	.137 .102 .104 .186 12 .394			.152 .084 .187 .280 183 .631	40
35	.073 .049 .044 .105 35 .185		.092 .073 .097 .106 24 .346	.083 .069 .023 .087 25 .104	.093 .074 .065 .134 131 .324	.126 .078 .109 .168 17 .430				.089 .067 .069 .115 232 .330	35
30	.051 .034 .007 .036 13 .059	.054 .046 .017 .072 24 .088	.077 .077 .003 .080 3 .091	.075 .071 .007 .083 7 .084	.087 .066 .024 .089 141 .112	.102 .091 .047 .142 28 .211				.070 .065 .030 .090 216 .145	30
25	.045 .045 .004 .048 3 .050	.050 .046 .014 .057 16 .063	.069 .075 .010 .077 8 .078	.103 .096 .016 .125 8 .131	.074 .074 .038 .097 120 .169	.054 .048 .022 .064 39 .088				.069 .064 .034 .094 194 .162	25
20		.042 .044 .009 .049 10 .054	.066 .062 .011 .064 3 .069	.039 .015 .049 .064 40 .185	.079 .069 .051 .122 28 .213	.044 .045 .011 .050 19 .065	.049 .049 .005 .052 2 .053			.052 .025 .044 .066 102 .185	20
15		.040 .050 .018 .056 7 .057	.019 .019 .009 .025 2 .026	.014 .014 .008 .022 14 .026	.021 .014 .015 .037 7 .080	.050 .060 .005 .054 5 .057	.046 .046 .007 .054 4 .058			.028 .022 .018 .051 39 .057	15
10		.026 .026 .005 .032 17 .034		.014 .014 .001 .015 3 .016	.013 .013 .001 .014 4 .014	.043 1	.035 .036 .004 .039 5 .042			.025 .024 .009 .033 30 .042	10
5		.032 .030 .009 .043 20 .051		.019 .020 .004 .022 13 .025	0.000 1		.024 .024 .004 .029 8 .031			.026 .022 .010 .034 42 .047	5
0		.025 .021 .010 .037 10 .041	.026 .027 .004 .032 3 .034	.016 .016 .003 .019 16 .022			.037 .036 .010 .046 8 .054			.024 .021 .011 .035 37 .051	0
5		.028 .027 .004 .031 4 .036		.010 .012 .006 .015 21 .021			.049 .040 .013 .062 9 .069			.023 .013 .019 .039 34 .065	5
10		.038 .038 .001 .038 6 .038		.018 .015 .008 .026 31 .032			.048 .049 .008 .055 7 .058			.025 .020 .014 .036 44 .055	10
15		.037 .038 .004 .039 6 .041	.032 .032 .004 .035 2 .036	.022 .024 .008 .029 24 .034			.052 1			.026 .025 .010 .036 33 .045	15
20		.036 .031 .008 .043 8 .046	.033 .035 .004 .036 8 .038	.023 .022 .006 .031 31 .033			.038 1			.026 .025 .008 .035 46 .042	20
25			.034 1	.025 .023 .013 .037 44 .068						.025 .023 .013 .037 45 .057	25
30			.030 1	.033 .032 .014 .046 62 .069						.033 .032 .014 .046 63 .059	30
35			.038 .033 .009 .044 16 .061	.041 .034 .021 .068 24 .078						.039 .029 .018 .057 40 .076	35
40			.036 .035 .004 .038 2 .039	.035 .033 .008 .046 11 .047						.035 .033 .008 .045 13 .047	40
45S											45S

LONGITUDE

TABLE IV. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.616 .080 4 .633 .686 .702	.547 .106 31 .560 .657 .690			.555 .106 35 .563 .663 .698	70N
65					.299 .226 52 .172 .561 .995	.504 .169 43 .572 .643 .683	.340 .161 36 .370 .507 .590	.258 .144 10 .189 .435 .449		.369 .207 141 .388 .589 .682	65
60				.150 .130 10 .087 .270 .412	.378 .295 17 .123 .733 .795	.454 .178 100 .499 .632 .709		.166 .051 3 .167 .208 .225		.414 .213 130 .466 .632 .761	60
55				.498 .206 49 .557 .662 .766	.249 .176 25 .178 .422 .567	.377 .191 129 .415 .564 .664	.412 .216 19 .448 .611 .656	.270 .220 30 .120 .577 .633		.378 .212 252 .404 .603 .708	55
50				.459 .193 87 .512 .629 .741	.282 .225 36 .187 .574 .663	.303 .225 119 .209 .568 .713	.328 .230 98 .307 .622 .722	.147 .109 63 .102 .246 .467		.306 .225 373 .225 .589 .723	50
45	.251 .149 23 .209 .415 .464		.153 .137 4 .122 .285 .338	.329 .228 66 .361 .599 .702	.270 .244 86 .160 .616 .757	.253 .179 153 .240 .430 .709	.418 .211 30 .505 .619 .684	.151 .136 17 .116 .291 .462		.278 .209 359 .245 .513 .709	45
40	.237 .143 34 .227 .360 .480		.136 .170 32 .064 .328 .572	.186 .133 38 .182 .343 .538	.195 .206 70 .084 .506 .675	.211 .183 205 .143 .458 .634	.263 .158 13 .210 .450 .671			.204 .180 392 .094 .420 .633	40
35	.082 .059 38 .065 .093 .290		.084 .082 13 .072 .122 .203		.090 .073 282 .074 .118 .384	.184 .160 30 .118 .321 .640	.275 .102 3 .252 .358 .403			.098 .087 366 .075 .125 .408	35
30	.049 .013 17 .047 .062 .072			.090 .023 25 .094 .109 .121	.086 .050 354 .075 .123 .236	.077 .040 2 .077 .104 .115	.165 .069 6 .170 .222 .262			.086 .050 404 .076 .122 .236	30
25			.066 .008 4 .065 .073 .077	.090 .033 33 .067 .121 .184	.095 .056 259 .085 .131 .271	.093 .029 18 .095 .127 .145	.044 .006 5 .042 .048 .053			.093 .052 316 .085 .126 .249	25
20			.061 .007 2 .061 .066 .068	.053 .043 61 .042 .091 .165	.090 .057 66 .082 .143 .230	.047 .019 21 .039 .069 .094	.058 .002 4 .058 .060 .060			.068 .051 154 .030 .112 .206	20
15		.029 1	.023 .025 33 .008 .058 .071	.022 .013 60 .021 .033 .063	.019 .009 12 .019 .026 .036	.050 .016 23 .046 .068 .096				.027 .020 129 .025 .047 .071	15
10		.016 .004 10 .016 .020 .022		.010 .001 4 .010 .011 .011	.023 .006 7 .026 .026 .029	.050 .007 15 .051 .056 .062	.043 .009 9 .045 .051 .053			.033 .017 45 .035 .052 .061	10
5		.025 .009 12 .022 .037 .039		.015 .005 6 .015 .020 .021	.026 .002 5 .027 .026 .026	.052 .005 2 .052 .055 .056	.033 .005 16 .031 .038 .044			.028 .010 41 .028 .038 .049	5
0		.031 .007 7 .031 .036 .040	.018 .006 8 .017 .021 .031	.019 .004 10 .019 .022 .026			.034 .005 14 .036 .039 .041			.026 .009 40 .023 .036 .041	0
5		.026 .008 8 .026 .033 .034	.013 .002 2 .013 .014 .015	.017 .006 17 .015 .023 .029			.031 .005 13 .032 .035 .039			.023 .009 41 .023 .032 .038	5
10		.023 .002 5 .022 .026 .025		.017 .005 19 .017 .022 .023			.043 .008 13 .043 .048 .059			.027 .014 37 .022 .043 .056	10
15		.024 .003 5 .022 .027 .029	.018 .003 8 .018 .020 .022	.016 .007 17 .014 .023 .026			.038 .015 15 .042 .048 .051			.025 .014 43 .022 .042 .049	15
20			.017 .002 7 .016 .020 .021	.023 .017 45 .020 .026 .075			.051 .005 2 .051 .054 .055			.023 .017 54 .018 .027 .075	20
25			.027 .003 7 .026 .030 .033	.022 .018 47 .016 .046 .062						.023 .017 54 .019 .042 .062	25
30			.043 .004 7 .045 .047 .047	.042 .027 36 .043 .065 .097						.042 .025 43 .045 .065 .092	30
35			.031 .017 5 .028 .041 .059	.070 .021 25 .073 .089 .101						.063 .025 30 .070 .087 .100	35
40											40
45S											45S

LONGITUDE

TABLE IV. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.585 .092 8 .585 .614 .776	.616 .065 12 .611 .698 .709			.603 .079 20 .585 .694 .767
65					.485 .227 61 .642 .712 .782	.631 .078 29 .637 .690 .777	.434 .118 20 .443 .559 .606	.518 .090 6 .553 .589 .597		.510 .198 136 .381 .695 .782
60				.408 .223 21 .378 .631 .827	.513 .234 125 .561 .780 .853	.496 .155 77 .531 .648 .714	.579 .153 28 .606 .716 .807	.388 .180 24 .436 .539 .599		.496 .206 275 .537 .688 .839
55				.579 .173 66 .581 .767 .884	.448 .197 80 .485 .648 .746	.413 .202 37 .429 .616 .788	.317 .239 11 .203 .586 .760	.352 .224 72 .347 .586 .768		.443 .221 248 .281 .676 .826
50				.477 .262 46 .565 .727 .827	.278 .199 72 .204 .602 .698	.435 .248 28 .581 .645 .703	.386 .125 50 .402 .505 .626	.278 .179 69 .298 .441 .633		.352 .217 266 .235 .597 .740
45	.387 .074 10 .387 .421 .486		.884 .036 2 .884 .676 .868	.281 .218 111 .141 .547 .899	.230 .230 93 .144 .550 .700	.404 .257 72 .450 .664 .822	.240 .196 64 .153 .497 .633	.320 .163 31 .369 .449 .603		.286 .230 383 .191 .594 .753
40	.482 .018 2 .482 .480 .484		.178 .130 34 .116 .263 .586	.231 .196 151 .156 .471 .719	.230 .205 142 .137 .430 .696	.246 .201 584 .167 .474 .783	.161 .170 11 .092 .263 .536	.389 .072 5 .361 .423 .423		.239 .198 939 .152 .465 .747
35	.079 .002 4 .076 .077 .077		.184 .145 88 .107 .308 .601	.347 .196 37 .287 .606 .733	.162 .153 499 .096 .348 .606	.237 .213 78 .146 .528 .755				.184 .189 664 .103 .374 .676
30	.127 .030 5 .131 .189 .156	.101 .007 4 .104 .107 .107	.102 .048 29 .060 .128 .236		.110 .078 515 .089 .138 .330					.110 .076 553 .090 .136 .329
25		.097 .031 17 .103 .111 .124	.061 .028 18 .058 .080 .106		.106 .050 396 .098 .146 .228					.103 .050 434 .098 .138 .223
20		.040 .012 6 .039 .060 .069	.006 .004 7 .005 .007 .013	.021 .034 46 .012 .078 .118	.082 .062 61 .078 .108 .275	.053 .015 20 .048 .067 .089				.055 .052 140 .030 .096 .187
15		.029 .004 4 .029 .034 .036	.022 .023 36 .009 .062 .063		.023 .015 34 .019 .037 .062	.060 .021 38 .059 .079 .101				.035 .027 112 .027 .061 .094
10		.042 .002 4 .043 .046 .048		.015 .007 10 .013 .019 .030	.018 .011 28 .013 .032 .039	.059 .013 26 .060 .072 .084	.054 .013 26 .056 .067 .074			.040 .022 96 .043 .064 .075
5				.011 .004 28 .011 .013 .018	.028 .004 8 .028 .029 .036		.027 .005 13 .026 .031 .032			.018 .009 49 .014 .028 .032
0			.033 .002 3 .032 .035 .036	.016 .015 17 .012 .017 .057	.033 .005 15 .032 .037 .042		.035 .011 16 .034 .042 .060			.028 .014 51 .030 .038 .061
5			.022 .004 8 .022 .024 .026	.017 .011 27 .016 .026 .040	.028 .003 11 .028 .029 .034		.046 .026 17 .040 .060 .117			.028 .020 63 .026 .040 .061
10			.026 .007 7 .024 .033 .036	.013 .009 25 .017 .020 .024	.024 .004 3 .022 .027 .029		.037 .003 15 .037 .042 .043			.023 .013 50 .014 .037 .042
15		.026 1		.014 .009 17 .018 .022 .026			.039 .008 18 .039 .046 .055			.027 .015 36 .015 .043 .054
20		.045 .008 4 .047 .051 .053		.010 .004 6 .012 .012 .013			.041 .013 12 .042 .053 .062			.033 .016 22 .030 .052 .061
25			.042 .002 5 .041 .044 .046	.017 .007 7 .013 .020 .031						.027 .013 12 .026 .042 .045
30			.038 1							.035 1
35			.028 .008 4 .030 .032 .034							.026 .008 4 .030 .032 .034
40										
45S										

LONGITUDE

TABLE IV. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65				.619 .624 .075 .664 4 .715	.588 .596 .128 .712 130 .810	.611 1				.589 .601 .126 .713 135 .809	65
60				.626 .665 .177 .802 135 .888	.491 .427 .310 .838 64 .960	.571 .630 .170 .731 14 .790	.590 .605 .068 .634 13 .693	.607 .624 .140 .683 30 .690		.585 .461 .219 .797 256 .914	60
55				.656 .668 .195 .821 143 1.116	.591 .638 .186 .712 40 .906	.622 .670 .128 .725 17 .793	.584 .497 .172 .713 55 .938	.497 .479 .151 .635 70 .866		.565 .612 .189 .778 325 .965	55
50				.643 .656 .170 .819 68 .916	.311 .288 .189 .487 43 .726	.367 .406 .232 .601 32 .738	.506 .499 .175 .656 36 .837	.443 .419 .192 .608 19 .614		.482 .344 .230 .715 198 .877	50
45	.513 .566 .068 .578 3 .583		.576 .637 .283 .883 14 .892	.422 .432 .239 .723 138 .858	.374 .352 .232 .636 110 .818	.436 .384 .322 .805 129 .995	.436 .412 .164 .640 47 .666			.421 .416 .262 .730 441 .927	45
40			.397 .395 .270 .701 46 .857	.375 .414 .234 .600 80 .793	.386 .401 .238 .636 176 .789	.282 .201 .212 .661 545 .832	.461 .393 .136 .542 6 .724			.320 .220 .228 .594 853 .821	40
35			.298 .283 .187 .506 11 .577	.342 .326 .171 .443 8 .679	.189 .152 .114 .274 129 .550	.245 .192 .182 .393 121 .617				.223 .184 .156 .355 269 .729	35
30			.087 .083 .009 .072 5 .083	.119 .109 .031 .154 22 .184	.135 .115 .064 .211 129 .270	.120 .124 .031 .150 16 .171				.129 .110 .059 .198 172 .266	30
25	.049 1		.076 .076 .007 .083 17 .097		.167 .146 .100 .251 112 .445	.081 .092 .031 .116 14 .116				.147 .116 .097 .238 144 .417	25
20			.083 .073 .015 .100 7 .106	.083 .084 .007 .086 4 .091	.147 .141 .058 .213 22 .251	.100 .107 .022 .114 8 .115	.051 .053 .007 .056 5 .058			.113 .099 .055 .170 46 .245	20
15		.047 .047 .013 .056 2 .059				.062 .041 .017 .066 3 .076	.052 .051 .002 .054 5 .056			.051 .046 .012 .056 10 .074	15
10					.045 .045 .006 .048 10 .055		.044 .049 .008 .050 3 .050			.045 .045 .006 .049 13 .055	10
5		.017 1		.038 .037 .007 .047 7 .048	.037 .035 .010 .048 5 .051		.038 .038 .006 .042 6 .049			.037 .037 .009 .047 19 .051	5
0				.050 .048 .007 .055 3 .059	.024 .023 .001 .024 3 .025		.035 .035 .003 .038 7 .040			.036 .035 .010 .042 13 .056	0
5					.066 .062 .026 .085 7 .086		.043 .044 .002 .045 4 .045			.058 .045 .024 .083 11 .086	5
10				.072 .073 .004 .074 5 .075	.051 .037 .026 .082 5 .086		.041 .043 .003 .043 6 .045			.054 .041 .019 .075 16 .084	10
15				.069 .066 .004 .072 5 .075	.038 .036 .011 .047 5 .054		.036 .036 .003 .037 2 .038			.050 .049 .017 .066 12 .074	15
20		.049 .049 .004 .052 2 .053			.025 .025 .002 .027 3 .028					.030 .026 .010 .038 10 .052	20
25			.045 1	.019 .019 .004 .021 6 .026	.024 .024 .003 .026 2 .027					.023 .019 .009 .027 9 .042	25
30			.040 .040 .001 .040 2 .040	.018 .018 .002 .020 4 .021						.025 .020 .010 .039 6 .040	30
35				.056 .040 .051 .114 22 .141						.056 .040 .051 .114 22 .141	35
40											40
45S											45S

LONGITUDE

TABLE IV. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65				.418 1	.480 .040 8 .480 .488 .497					.446 .038 3 .420 .474 .496
60				.696 .154 13 .764 .836 .916		.461 .130 6 .456 .561 .675				.823 .184 19 .648 .803 .909
55				.690 .170 80 .669 .868 1.016		.342 .205 18 .195 .586 .636	.455 .086 14 .419 .515 .669	.416 .043 11 .424 .456 .472		.594 .211 120 .601 .772 1.002
50				.765 .192 123 .776 .967 1.098		.666 .283 22 .630 .899 1.230	.381 .130 29 .382 .471 .662	.549 .221 41 .536 .784 .996		.859 .246 215 .840 .936 1.100
45	.604 .100 7 .675 .677 .686		.814 .193 33 .802 .749 1.079	.676 .209 106 .645 .866 1.121	.397 .201 104 .433 .687 .736	.442 .258 107 .363 .741 1.006	.416 .141 42 .415 .520 .730	.471 .073 16 .464 .537 .600		.503 .240 405 .516 .723 1.035
40	.576 .080 10 .593 .620 .681		.448 .251 101 .438 .729 .824	.468 .045 9 .458 .486 .565	.436 .247 117 .440 .644 1.036	.342 .181 101 .326 .499 .769	.280 .115 3 .365 .363 .367			.401 .223 421 .397 .619 .821
35	.375 .191 21 .411 .609 .650		.188 .181 29 .096 .405 .632		.443 .333 7 .309 .702 1.107	.346 .262 12 .191 .626 .860				.298 .240 69 .203 .547 .654
30	.085 .020 14 .080 .098 .132		.103 .011 18 .106 .108 .116		.141 .034 22 .131 .173 .222					.114 .034 54 .106 .135 .201
25	.061 1		.074 .019 20 .073 .086 .119		.150 .043 24 .138 .182 .256					.114 .051 45 .108 .167 .255
20		.109 .016 8 .104 .122 .145	.071 .024 13 .063 .089 .120		.096 .008 9 .086 .106 .107					.089 .025 30 .078 .107 .135
15		.060 .013 4 .056 .073 .078	.045 .013 12 .041 .059 .071		.063 .022 7 .047 .088 .092					.060 .017 23 .047 .066 .088
10			.032 .010 7 .030 .041 .050		.040 .007 9 .038 .046 .050					.035 .010 10 .032 .046 .051
5		.017 1	.018 .003 2 .018 .019 .020							.017 .002 3 .017 .019 .020
0										
5										
10										
15				.060 1						.060 1
20				.036 .005 6 .036 .041 .041						.036 .005 6 .036 .041 .041
25				.028 .004 2 .028 .028 .028	.052 .022 7 .046 .079 .086					.046 .022 9 .034 .074 .085
30				.079 .012 9 .074 .095 .096	.078 1					.079 .011 10 .076 .095 .096
35				.126 .048 31 .108 .193 .199						.126 .048 31 .108 .193 .199
40										
45S										

LONGITUDE

TABLE IV. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(h) Flight level 430

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

APRIL
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55				.530 .515 .099 .577 9 .734						.530 .515 .099 .577 9 .734
50				.695 .667 .114 .803 13 .901			.379 .345 .074 .430 4 .497			.620 .633 .171 .786 17 .900
45			.675 .630 .127 .612 15 .906	.704 .715 .153 .831 15 .976		.384 .401 .105 .486 42 .562	.294 .308 .038 .326 9 .340			.487 .469 .195 .718 81 .906
40			.490 .511 .138 .654 41 .765		.409 .438 .063 .459 10 .482	.260 .236 .127 .404 45 .543	.356 1			.373 .347 .174 .553 97 .709
35			.289 .248 .127 .374 5 .506		.270 .267 .067 .332 4 .358					.280 .248 .105 .345 9 .493
30					.315 .295 .097 .434 10 .461					.315 .295 .097 .434 10 .461
25					.190 .190 .011 .197 2 .201					.190 .190 .011 .197 2 .201
20			.072 .068 .006 .076 3 .080							.072 .068 .006 .076 3 .080
15		.081 .080 .002 .082 4 .083	.076 .077 .006 .081 4 .082							.078 .080 .005 .082 8 .083
10										
5										
0										
5										
10										
15										
20										
25				.073 1						.073 1
30										
35				.184 .218 .061 .236 24 .250						.184 .218 .061 .236 24 .250
40										
45S										

LONGITUDE

TABLE V. - GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60											60
55								.068 .048 .047 .064 8 .173		.068 .048 .047 .064 8 .173	55
50								.050 .058 .021 .068 22 .084		.050 .055 .021 .068 22 .084	50
45	.077 .080 .040 .108 21 .170				.024 1	.070 1	.095 1	.072 .089 .025 .084 8 .096		.075 .059 .036 .102 32 .148	45
40	.058 .038 .038 .100 35 .138				.042 .056 .028 .061 3 .082	.100 .079 .058 .194 16 .198	.054 .049 .043 .062 12 .160			.065 .037 .048 .101 66 .198	40
35	.045 .041 .023 .068 12 .085		.062 .066 .020 .079 3 .088		.073 .077 .036 .112 8 .126	.071 .065 .031 .096 3 .113	.062 .066 .011 .073 7 .076			.059 .055 .028 .081 33 .120	35
30						.074 .071 .027 .087 3 .107	.063 .067 .012 .072 3 .078			.069 .057 .022 .082 6 .106	30
25		.036 1	.041 .037 .009 .049 3 .053		.056 .056 .017 .069 3 .069	.064 1	.047 .047 .006 .062 4 .063			.049 .047 .013 .065 12 .069	25
20		.036 1	.076 .061 .012 .065 3 .097		.062 .048 .023 .074 21 .090					.055 .053 .023 .078 25 .097	20
15		.048 .048 .003 .018 4 .048	.045 .060 .010 .082 11 .088			.023 1				.044 .046 .010 .062 16 .055	15
10		.027 .032 .010 .038 6 .048	.026 .030 .003 .028 8 .031			.027 .027 .001 .026 2 .028	.036 .021 .021 .061 5 .064			.029 .025 .013 .037 18 .062	10
5			.018 .018 .004 .021 4 .023			.017 1				.018 .016 .004 .020 5 .025	5
0			.014 .013 .003 .016 7 .019							.014 .013 .003 .015 7 .019	0
5			.024 .019 .007 .031 8 .034							.024 .019 .007 .031 5 .034	5
10			.029 .028 .002 .031 3 .032							.029 .028 .002 .031 3 .032	10
15				.031 .031 .003 .033 2 .034	.001 1					.021 .028 .014 .032 3 .034	15
20				.034 .034 .009 .040 2 .043			.022 1			.030 .025 .009 .037 3 .042	20
25							.010 .010 .000 .010 2 .010			.010 .010 .000 .010 2 .010	25
30			.017 1							.017 1	30
35			.022 .022 .002 .023 2 .043	.035 .029 .011 .030 4 .039						.024 .015 .009 .034 6 .036	35
40											40
45S											45S

LONGITUDE

TABLE V. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 310

Latitude	15E–60E	60E–105E	105E–150E	150E–165W	165W–120W	120W–75W	75W–30W	30W–15E	MEAN
70N									
65					.199 1				.199 1
60							.021 003 9 .019 .023 .027	064 .040 10 .045 .119 .126	.044 037 19 .024 .083 125
55							028 016 6 .019 042 058	.153 .168 28 .053 .401 .456	.131 .160 34 .050 398 453
50					.121 109 2 .121 195 226		170 086 12 185 251 305	079 .045 33 072 .104 .198	.104 073 47 .074 186 .279
45					.016 .002 3 .015 .018 .019	.092 .019 2 .092 105 110	105 039 12 097 143 177	.097 .007 4 .094 .102 .108	089 .043 21 093 .111 174
40	.082 025 15 076 106 132				.021 026 16 .016 .023 .092	088 063 51 076 .133 277	.077 043 5 .070 102 .147		074 .057 87 068 .099 235
35	055 022 16 057 078 .089		.111 030 8 .103 .133 .170	.116 .053 3 .087 .158 .187	.052 .046 44 .043 .074 .193	.091 083 4 .063 .137 190			064 047 75 .055 .087 195
30	047 018 11 044 061 .085	.075 .023 18 071 .101 .115			.056 .026 27 .061 .080 .096	.039 011 3 .038 .048 052			.059 .025 59 .055 .084 112
25	043 003 7 044 045 048	.042 .009 8 .042 .052 .054		052 .026 19 045 .055 .127	.047 .016 19 .050 .059 .075		.036 1		.047 .019 54 .043 055 105
20			.073 1		.047 .023 28 .050 073 .091		.035 .001 2 035 .036 036		047 .023 31 049 .073 .090
15		.043 1	.043 .014 19 .045 055 .068		.031 .015 20 .030 .044 065	.024 016 12 021 .044 053			.034 017 52 .035 .051 .072
10		.041 .001 4 .041 .042 042		.009 .008 3 .008 .016 .020	.020 .003 3 .021 .022 .023	.020 .005 7 .019 025 029	017 008 12 .020 .023 .025		.021 011 29 .020 .027 .042
5		.020 .012 3 014 .029 .035		.019 .013 3 .027 028 .029		.008 1			.018 012 7 .014 029 035
0									
5		.037 .005 4 .035 041 .045							037 .005 4 .035 .041 045
10		.032 .004 5 032 .036 .037					021 .005 4 021 .024 027		.027 .007 9 .027 .034 .037
15		029 .011 6 027 .032 050		.034 .004 2 .034 .036 .037	.030 .002 2 .030 .031 .032		022 005 6 023 026 027		.027 008 16 026 031 040
20		.040 .006 5 .040 .047 .050	.027 .002 7 .028 .030 .031				.018 .005 2 .018 .021 022		.031 009 14 .029 .040 049
25			.033 .006 21 .032 .039 .044						033 006 21 .032 039 044
30			.039 .012 16 .041 .052 .057	.027 .006 5 .026 .031 .036					.036 012 21 .037 047 .057
35			.036 032 29 .027 .034 .143	.064 .058 27 .035 .136 .185			.036 1		.049 048 57 .029 078 180
40			.027 1						.027 1
45S									

LONGITUDE

TABLE V. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N					.265 1					.265 1
65										
60										
55						.536 .842 .024 .557 4 .559	.211 .108 .174 .392 41 .568	.358 .388 .185 .553 37 .592		.293 .165 .197 .531 82 .584
50					.063 .020 .089 .123 10 .259	.485 .470 .055 .555 8 .558	.063 .055 .032 .107 32 .130	.088 .081 .029 .089 42 .154		.093 .042 .113 .116 90 .506
45	.053 .047 .018 .068 4 .080			.036 .030 .023 .049 8 .086	.079 .067 .085 .129 24 .304	.290 .138 .172 .492 15 .525	.115 .070 .111 .186 92 .404			.117 .074 .122 .207 143 .496
40	.106 .101 .041 .150 27 .187			.176 .131 .114 .326 42 .426	.106 .045 .144 .196 18 .463	.130 .097 .112 .188 44 .494	.113 .082 .092 .196 23 .331			.133 .074 .109 .191 154 .491
35	.084 .089 .039 .126 12 .132		.063 .068 .031 .091 15 .096	.060 .022 .037 .092 31 .104	.081 .061 .079 .093 94 .387	.084 .066 .065 .103 22 .240	.088 .085 .024 .108 8 .132			.075 .061 .065 .098 182 .341
30	.042 .033 .017 .064 6 .068	.082 .058 .018 .063 24 .094	.057 .052 .018 .076 18 .081		.071 .073 .038 .101 99 .145	.094 .077 .078 .121 37 .365	.042 .032 .015 .054 3 .063			.071 .054 .047 .101 186 .188
25		.095 1	.067 .065 .010 .076 21 .088	.058 .055 .006 .062 17 .075	.073 .057 .094 .093 99 .249	.056 .048 .028 .090 26 .114	.031 .031 .001 .032 2 .032			.067 .057 .074 .089 165 .180
20		.130 .130 .010 .137 2 .140	.075 1	.061 .052 .025 .094 49 .107	.056 .054 .025 .075 26 .111	.048 .030 .036 .076 13 .133	.050 .045 .019 .071 9 .075			.059 .033 .028 .090 96 .130
15			.036 .037 .019 .053 39 .071	.040 .034 .023 .066 86 .092		.027 .031 .007 .031 4 .031	.030 .029 .006 .036 8 .040			.038 .032 .021 .059 117 .087
10		.014 1			.025 1	.038 .038 .002 .038 2 .039	.040 .035 .014 .046 5 .065			.035 .036 .013 .038 9 .063
5		.017 .017 .003 .020 5 .021		.033 1		.014 0.000 .014 .014 2 .014	.024 .024 .003 .026 5 .029			.021 .020 .006 .027 13 .032
0		.023 .024 .004 .026 6 .027					.026 1			.024 .024 .004 .027 7 .028
5		.034 1								.034 1
10		.017 1								.017 1
15			.038 .042 .007 .044 6 .045	.033 .033 .004 .035 2 .036	.030 .030 .005 .034 14 .038					.032 .031 .007 .040 22 .045
20			.036 .042 .010 .046 5 .060	.032 .024 .017 .056 8 .060			.014 .013 .009 .021 4 .026			.029 .025 .016 .047 17 .060
25			.027 1	.036 .036 .012 .051 24 .057						.037 .037 .012 .051 25 .057
30			.022 .022 0.000 .022 2 .022	.050 .043 .029 .067 35 .125						.048 .042 .025 .063 37 .125
35			.047 .044 .008 .054 3 .057	.073 .038 .065 .145 28 .230						.070 .039 .062 .144 29 .227
40										
45S										

LONGITUDE

TABLE V. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(d) Flight level 350

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

MAY
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N								.604 .038 6 .605 .643 .655		.604 .038 6 .605 .643 .635
65					.584 .009 4 .585 .592 .594	.636 .010 2 .636 .643 .646		.626 .014 4 .630 .638 .641		.611 .026 10 .615 .638 .645
60					.552 .185 9 .646 .673 .690	.500 .110 19 .485 .627 .658		.623 .070 8 .634 .690 .695		.540 .136 36 .535 .663 .694
55				.299 .167 21 .303 .509 .577	.331 .246 55 .260 .649 .661	.337 .195 18 .465 .504 .543	.282 .164 55 .248 .484 .611	.229 .192 100 .125 .530 .631		.277 .203 249 .213 .553 .653
50					.267 .225 38 .253 .541 .636	.193 .162 23 .126 .374 .577	.174 .131 122 .118 .290 .655	.206 .172 86 .138 .414 .575		.199 .174 269 .129 .357 .625
45	.031 .018 19 .038 .043 .065			.101 .097 10 .062 .146 .323	.263 .213 45 .182 .534 .669	.129 .097 33 .087 .249 .364	.213 .168 69 .128 .400 .601	.337 .249 13 .429 .613 .616		.196 .186 191 .098 .407 .631
40	.073 .064 37 .053 .131 .238		.315 .004 3 .340 .384 .451	.212 .176 13 .128 .325 .596	.087 .048 60 .080 .102 .262	.152 .137 218 .095 .229 .592	.150 .111 6 .078 .293 .323	.113 .022 2 .113 .127 .133		.136 .126 339 .088 .202 .565
35	.059 .045 16 .041 .115 .148		.066 .011 2 .066 .073 .076	.055 .036 11 .082 .089 .096	.078 .061 150 .058 .119 .259	.139 .109 36 .088 .252 .433	.116 .015 4 .115 .130 .136			.086 .073 219 .064 .124 .339
30	.075 .051 16 .067 .128 .161	.033 .021 33 .019 .061 .074		.033 .025 8 .021 .056 .079	.080 .050 234 .077 .102 .261	.090 .005 2 .090 .093 .094				.074 .049 293 .069 .101 .245
25		.008 .005 19 .006 .014 .017		.059 .024 89 .057 .067 .100	.072 .034 201 .071 .103 .148	.037 .005 10 .038 .041 .044				.065 .033 310 .058 .097 .132
20		.006 .002 3 .005 .006 .009	.057 .008 7 .058 .064 .065	.050 .024 94 .048 .072 .103	.067 .033 61 .060 .104 .133	.045 .013 10 .040 .058 .072	.027 1			.055 .028 176 .041 .080 .129
15		.042 .011 6 .041 .054 .056	.050 .026 57 .052 .064 .113	.046 .026 40 .044 .076 .101	.032 .016 19 .027 .035 .078	.016 .011 24 .013 .027 .042	.027 .003 8 .028 .030 .032			.040 .025 154 .034 .059 .112
10		.024 .008 5 .028 .031 .032	.025 .004 4 .026 .029 .030	.015 .000 3 .015 .015 .015	.026 .008 23 .027 .032 .043	.012 .006 16 .015 .017 .021	.020 .015 12 .014 .023 .058			.021 .011 63 .019 .029 .043
5		.016 .001 6 .015 .016 .018	.018 .002 5 .017 .019 .022	.017 .005 5 .016 .022 .023	.027 .012 16 .023 .036 .054		.013 .006 6 .014 .017 .019			.020 .010 38 .016 .026 .047
0		.018 .007 10 .017 .021 .034	.014 .001 4 .015 .016 .016	.026 .010 18 .027 .036 .044	.035 .001 2 .035 .036 .036		.015 .004 6 .014 .016 .022			.022 .010 40 .015 .034 .042
5		.025 .005 8 .023 .030 .033	.022 .005 9 .020 .029 .029	.026 .011 16 .031 .038 .039	.046 .003 2 .046 .048 .049		.021 .008 8 .022 .030 .031			.025 .010 43 .025 .035 .044
10		.024 .004 6 .024 .027 .029	.028 .005 14 .026 .030 .038	.024 .012 16 .024 .033 .048	.040 .006 6 .041 .044 .049		.022 .010 16 .018 .031 .040			.026 .010 58 .025 .034 .049
15		.027 .005 6 .028 .031 .031	.032 .007 12 .031 .039 .046	.024 .011 12 .022 .035 .042	.046 0 .000 2 .046 .046 .046		.017 .008 15 .015 .027 .029			.025 .011 47 .026 .034 .046
20		.031 .005 7 .029 .037 .040	.044 .005 11 .044 .049 .051	.030 .019 20 .025 .035 .078			.013 .008 9 .015 .021 .025			.030 .017 47 .027 .045 .077
25			.029 .008 8 .028 .033 .042	.033 .017 27 .032 .048 .071						.032 .016 35 .030 .044 .068
30			.025 .005 4 .024 .029 .032	.036 .015 25 .032 .045 .075						.035 .015 29 .031 .043 .074
35			.033 .010 8 .032 .039 .053	.102 .095 6 .053 .197 .268			.053 1			.062 .069 15 .033 .071 .250
40										
45S										

LONGITUDE

TABLE V. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65					.383 .037 2 .383 .418 .429	.653 .021 5 .659 .669 .684	.504 .122 6 .550 .566 .678	.596 .060 6 .639 .662 .669		.555 .118 21 .569 .660 .690	65
60				.589 .112 17 .591 .717 .740	.499 .148 55 .514 .638 .665	.522 .212 9 .636 .692 .720	.365 .205 19 .362 .624 .677	.615 .050 16 .619 .644 .700		.508 .170 116 .502 .650 .727	60
55				.400 .275 54 .482 .680 .766	.503 .247 31 .604 .715 .854	.493 .183 24 .546 .694 .725	.269 .120 50 .266 .357 .632	.216 .156 43 .151 .336 .563		.360 .232 202 .246 .638 .768	55
50				.382 .293 25 .347 .676 .665	.461 .250 18 .612 .685 .718	.454 .190 13 .583 .603 .641	.232 .131 96 .223 .384 .570	.274 .178 114 .240 .449 .642		.291 .198 266 .183 .560 .679	50
45	.182 .161 15 .125 .376 .465			.267 .271 36 .089 .713 .795	.324 .219 30 .303 .637 .664	.290 .213 34 .186 .599 .671	.257 .175 61 .200 .406 .702	.236 .192 21 .091 .484 .564		.267 .212 196 .176 .513 .739	45
40	.183 .118 23 .156 .279 .466		.079 .020 15 .080 .100 .104	.211 .224 64 .092 .504 .771	.103 .110 59 .069 .163 .465	.211 .180 361 .129 .431 .667	.398 .206 17 .464 .606 .661			.201 .184 539 .120 .419 .673	40
35	.085 .025 12 .093 .105 .117		.110 .069 48 .090 .177 .206	.141 .081 8 .111 .225 .248	.119 .091 218 .093 .169 .391	.133 .095 86 .114 .190 .445	.058 .014 7 .055 .067 .085			.119 .087 359 .094 .170 .385	35
30	.042 .020 15 .042 .065 .071	.043 .012 15 .045 .053 .058	.143 .080 23 .165 .219 .274	.071 .032 34 .068 .095 .122	.092 .083 350 .071 .109 .368	.109 .100 17 .089 .133 .361				.091 .080 454 .069 .111 .361	30
25	.078 1	.063 .021 24 .054 .080 .108	.093 .039 18 .090 .109 .196	.043 .039 11 .016 .081 .117	.068 .028 272 .063 .088 .124	.025 .018 26 .026 .035 .069	.085 .013 2 .085 .094 .097			.065 .031 354 .061 .097 .124	25
20		.065 .014 18 .064 .080 .092	.053 .024 13 .062 .077 .088	.065 .034 37 .061 .099 .138	.066 .032 64 .063 .086 .143	.038 .041 44 .030 .048 .143	.092 .005 4 .092 .097 .098			.059 .035 180 .044 .085 .141	20
15		.063 .006 21 .064 .070 .075	.046 .020 34 .034 .070 .080	.077 .031 14 .076 .104 .133	.051 .033 26 .033 .089 .107	.033 .016 61 .034 .048 .057	.062 .021 3 .061 .079 .087			.048 .026 149 .043 .071 .104	15
10					.043 .027 40 .027 .078 .097	.026 .016 22 .021 .043 .050	.038 .020 24 .047 .054 .065			.037 .023 86 .026 .054 .096	10
5					.033 .016 46 .030 .042 .089	.011 .003 2 .011 .012 .013	.016 .014 35 .013 .029 .053			.026 .017 83 .025 .036 .069	5
0				.027 .004 4 .026 .030 .032	.031 .006 34 .031 .035 .048		.010 .009 48 .008 .019 .032			.019 .013 86 .021 .032 .044	0
5				.035 .017 12 .032 .048 .068	.036 .010 28 .034 .048 .059		.015 .009 32 .014 .024 .036			.026 .015 70 .026 .043 .060	5
10				.041 .019 22 .038 .063 .070	.022 .024 10 .018 .042 .069		.016 .009 30 .019 .026 .037			.027 .019 62 .011 .045 .070	10
15				.033 .014 29 .028 .044 .070	.019 .008 14 .023 .024 .026		.023 .012 27 .020 .037 .041			.026 .013 70 .024 .037 .064	15
20				.037 .019 19 .029 .058 .077			.024 .014 26 .027 .037 .047			.030 .017 44 .022 .045 .071	20
25			.027 .005 3 .023 .030 .034	.030 .005 7 .028 .032 .040			.040 .002 8 .040 .042 .048			.033 .007 15 .032 .040 .044	25
30			.028 .004 8 .028 .031 .038	.045 .012 7 .048 .051 .065			.037 .008 4 .038 .045 .047			.037 .012 16 .033 .048 .062	30
35			.044 .029 19 .030 .058 .120	.096 .030 8 .093 .130 .131						.055 .036 24 .038 .087 .136	35
40			.135 .003 2 .135 .137 .138							.135 .003 2 .135 .137 .138	40
45S											45S

LONGITUDE

TABLE V. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.724 .934 6 .727 .767 .766				.724 .934 6 .727 .767 .766	70N
65				.560 1	.706 .866 13 .726 .768 .842	.624 .041 11 .621 .654 .704	.596 .107 27 .631 .710 .751	.502 1		.626 .102 53 .632 .727 .783	65
60				.020 .119 24 .834 .749 .819	.594 .148 38 .617 .706 .765	.672 .099 16 .630 .793 .674	.412 .054 4 .416 .457 .479	.483 .082 8 .500 .523 .599		.598 .139 92 .601 .721 .837	60
55				.647 .096 63 .649 .754 .809	.256 .084 6 .248 .341 .363	.644 .018 6 .642 .660 .673	.444 .104 43 .456 .548 .586	.569 .146 28 .591 .695 .750		.556 .152 146 .520 .686 .769	55
50				.485 .173 53 .537 .660 .708	.345 .019 4 .345 .359 .369	.626 1	.341 .154 61 .328 .519 .622	.566 .133 21 .621 .666 .702		.432 .179 140 .400 .628 .697	50
45	.110 .079 5 .060 .186 .239		.311 .225 16 .329 .581 .651	.342 .227 106 .339 .620 .708	.386 .233 80 .388 .627 .711	.385 .203 103 .404 .618 .754	.253 .213 71 .141 .533 .649	.425 .197 13 .408 .641 .654		.345 .225 394 .220 .614 .738	45
40			.126 .126 26 .085 .269 .458	.127 .118 39 .067 .295 .413	.249 .235 30 .137 .627 .702	.286 .181 270 .223 .505 .683	.114 .148 17 .067 .091 .526			.248 .188 382 .183 .488 .680	40
35			.126 .094 15 .096 .143 .371	.074 .019 18 .082 .089 .102	.143 .094 40 .102 .237 .376	.182 .103 98 .150 .295 .473	.164 .047 2 .164 .195 .208			.157 .100 173 .117 .244 .444	35
30			.081 .036 8 .067 .101 .144	.078 .027 6 .083 .107 .128	.128 .115 142 .093 .191 .528	.147 .122 49 .094 .264 .479	.066 .041 6 .061 .104 .129			.128 .114 208 .082 .192 .505	30
25			.069 .027 3 .082 .089 .093		.097 .062 91 .085 .163 .261	.042 .030 38 .043 .059 .101	.025 .012 3 .032 .035 .036			.079 .060 135 .067 .135 .239	25
20			.041 .024 25 .030 .060 .106		.053 .033 23 .039 .087 .127	.028 .019 33 .028 .050 .070	.029 .016 9 .026 .026 .065			.038 .026 90 .031 .062 .103	20
15			.029 .011 8 .033 .039 .046	.036 .009 8 .038 .043 .047	.033 .012 24 .031 .037 .067	.027 .009 10 .026 .034 .043	.057 .031 6 .050 .096 .098			.034 .017 57 .031 .043 .092	15
10					.029 .008 29 .030 .038 .044		.035 .025 16 .026 .065 .085			.031 .017 45 .029 .040 .078	10
5		.030 1		.084 .009 2 .054 .059 .062	.033 .012 26 .032 .046 .053		.018 .019 28 .009 .048 .057			.026 .018 57 .027 .047 .060	5
0				.022 .015 5 .018 .033 .044	.031 .010 28 .030 .037 .053		.011 .010 28 .008 .024 .032			.021 .014 61 .022 .033 .046	0
5				.062 1	.035 .016 38 .031 .049 .078		.014 .013 20 .010 .034 .039			.028 .018 59 .028 .044 .076	5
10				.037 .010 31 .035 .044 .062	.031 .007 17 .028 .038 .044		.023 .012 14 .020 .038 .047			.032 .011 62 .027 .044 .059	10
15				.040 .018 34 .035 .060 .072	.040 .006 6 .044 .046 .048		.023 .012 13 .016 .031 .047			.036 .018 53 .033 .053 .070	15
20				.048 .017 31 .081 .064 .085	.047 .004 6 .049 .049 .061		.015 .006 6 .018 .020 .021			.043 .018 43 .046 .059 .082	20
25				.056 .052 43 .037 .086 .203	.061 .005 4 .058 .064 .068		.025 1			.055 .049 48 .039 .080 .191	25
30				.084 .072 49 .058 .124 .308						.084 .072 49 .058 .124 .308	30
35				.133 .100 81 .095 .231 .397						.133 .100 81 .095 .231 .397	35
40											40
45S											45S

LONGITUDE

TABLE V. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65								.577 1		.577 1
60					.598 .095 4 .595 .690 .716	.535 .281 5 .452 .681 .883	.680 .060 16 .700 .724 .756	.706 .149 15 .718 .836 .930		.663 .153 40 .668 .804 .915
55				.640 .044 4 .632 .675 .706		.660 .163 25 .725 .781 .834	.486 .098 24 .476 .555 .717	.654 .190 23 .673 .855 .939		.603 .170 76 .584 .779 .924
50				.527 .200 35 .562 .685 .782	.319 .192 16 .241 .550 .606	.666 .171 17 .670 .867 .977	.474 .087 8 .477 .620 .622	.499 .039 11 .505 .536 .560		.511 .206 87 .535 .684 .958
45			.405 .226 11 .500 .633 .689	.512 .202 46 .560 .656 .820	.399 .234 67 .348 .704 .847	.388 .175 46 .390 .578 .698	.482 .176 16 .561 .589 .726			.431 .213 188 .382 .646 .806
40	.333 .027 6 .323 .363 .375		.372 .217 41 .417 .590 .666	.069 .009 5 .056 .065 .075	.368 .235 44 .304 .647 .816	.361 .176 82 .320 .584 .652	.328 .083 2 .328 .384 .407	.326 1		.355 .202 181 .323 .587 .758
35	.226 .049 9 .231 .248 .322		.202 .134 23 .137 .307 .503		.530 .273 26 .617 .800 .846	.274 .171 75 .213 .525 .643	.218 .060 7 .218 .277 .287			.304 .213 140 .197 .596 .821
30	.208 .055 6 .218 .263 .268		.130 .087 21 .118 .196 .231		.234 .176 59 .150 .420 .622	.278 .069 6 .269 .320 .402	.107 .004 4 .107 .111 .112			.207 .150 96 .122 .386 .612
25			.079 .015 17 .079 .092 .112		.130 .069 48 .113 .194 .318		.091 .013 6 .098 .101 .106			.115 .061 71 .097 .171 .291
20			.068 .014 11 .072 .081 .086		.078 .036 29 .072 .107 .143		.088 .013 7 .095 .098 .099			.076 .030 47 .078 .104 .136
15			.054 .010 11 .061 .064 .075		.047 .025 24 .038 .076 .101		.100 1			.050 .023 36 .039 .076 .102
10			.039 .010 14 .040 .061 .083		.039 .021 27 .033 .064 .079					.039 .018 41 .035 .052 .079
5			.036 .009 3 .030 .042 .047		.030 .014 21 .029 .040 .056					.030 .013 24 .029 .043 .057
0				.032 .013 16 .034 .042 .061	.043 .008 4 .040 .049 .064					.034 .013 20 .035 .044 .055
5				.031 .010 13 .031 .039 .047						.031 .010 13 .031 .039 .047
10				.032 .010 14 .032 .036 .064						.032 .010 14 .032 .036 .054
15				.030 .011 4 .028 .039 .046	.031 .007 24 .030 .036 .048					.031 .008 28 .029 .036 .050
20				.023 .005 6 .024 .026 .027						.023 .005 6 .024 .026 .027
25				.037 .019 6 .033 .049 .070			.053 .028 5 .045 .081 .094			.045 .025 10 .027 .073 .092
30				.113 .038 6 .104 .159 .166			.066 .016 6 .064 .106 .113			.101 .031 12 .081 .127 .165
35				.163 .074 52 .145 .251 .293						.163 .074 52 .145 .251 .293
40										
45S										

LONGITUDE

TABLE V. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55							.463 1			.463 1
50						.954 .055 5 .976 1.005 1.011	.388 .085 10 .339 .459 .565			.577 .277 15 .444 .960 1.009
45			.527 .032 2 .527 .549 .556	.499 .027 7 .496 .517 .550	.241 .073 6 .249 .285 .359	.575 .107 12 .562 .673 .724	.491 .116 9 .503 .611 .640			.481 .145 36 .449 .619 .710
40			.569 .065 7 .571 .682 .690		.193 .131 17 .129 .311 .515	.367 .212 50 .309 .594 .980				.348 .214 74 .285 .580 .907
35			.539 1		.316 .124 12 .298 .358 .602	.299 .129 30 .277 .404 .604				.309 .131 43 .295 .403 .660
30			.084 .012 5 .053 .066 .066		.217 .021 12 .222 .233 .251					.169 .077 17 .203 .230 .249
25			.084 .004 8 .055 .057 .059		.137 .032 10 .131 .171 .193					.100 .048 18 .100 .152 .191
20			.065 .009 4 .065 .072 .077		.039 .019 3 .031 .054 .064					.054 .019 7 .064 .066 .076
15			.049 .017 8 .046 .068 .078		.027 .003 3 .025 .029 .031					.043 .017 11 .037 .060 .077
10			.040 .008 14 .040 .050 .053							.040 .008 14 .040 .050 .053
5	.048 .001 3 .049 .049 .049		.047 .006 5 .045 .051 .054							.047 .004 8 .045 .050 .053
0				.032 1						.032 1
5				.023 .017 3 .031 .036 .038						.023 .017 3 .031 .036 .038
10				.042 .017 5 .030 .063 .065						.042 .017 5 .030 .063 .065
15				.038 .008 8 .039 .044 .048	.043 .022 30 .037 .061 .102					.042 .020 38 .036 .051 .102
20										
25										
30										
35				.187 .068 22 .154 .269 .332						.187 .068 22 .154 .269 .332
40										
45S										

LONGITUDE

TABLE VI. - GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55								.072 .077 12 .077 .085 .090		.072 .077 12 .077 .085 .090
50					.079 1	.001 1		.104 .066 19 .092 .152 .346		.098 .068 21 .090 .144 .346
45	.066 .081 13 .021 .089 .109			.050 .046 6 .010 .063 .064		.080 .062 5 .006 .065 .066	.075 .079 6 .019 .095 .096	.066 .060 7 .050 .109 .157		.056 .062 30 .028 .092 .121
40	.118 .112 21 .041 .153 .207		.082 .071 6 .037 .106 .150	.075 .067 6 .040 .106 .141	.065 .046 5 .037 .092 .128	.090 .079 15 .068 .139 .243	.060 .076 9 .035 .088 .098			.091 .068 62 .052 .135 .222
35	.103 .095 11 .050 .160 .178		.083 .072 18 .045 .096 .198		.063 .058 6 .020 .081 .097	.059 .056 13 .019 .074 .102				.078 .066 47 .041 .106 .183
30	.083 .069 11 .016 .097 .109	.079 .090 10 .014 .092 .096	.050 .053 7 .004 .053 .054							.073 .063 28 .019 .095 .103
25	.057 .055 7 .011 .066 .074	.059 .055 6 .028 .089 .102	.056 .052 12 .016 .073 .079		.050 .060 6 .018 .065 .070					.056 .049 32 .019 .073 .097
20		.041 .038 12 .010 .045 .064	.069 .069 4 .026 .080 .082		.042 .037 17 .017 .055 .061					.044 .038 33 .017 .059 .086
15		.024 1							.024 1	
10		.026 .026 7 .001 .027 .028							.026 .026 7 .001 .027 .028	
5		.025 .026 6 .002 .027 .027							.025 .026 6 .002 .027 .027	
0		.026 1	.009 1						.018 .018 2 .009 .023 .026	
5			.019 1						.019 1	
10				.026 .026 2 .006 .029 .031					.026 .026 2 .006 .029 .031	
15				.034 .034 2 .005 .037 .039					.034 .034 2 .005 .037 .039	
20		.029 .029 4 .006 .033 .037	.038 .038 2 .001 .039 .039	.035 1					.032 .035 7 .006 .037 .039	
25			.036 .036 7 .002 .038 .039	.045 1					.037 .036 6 .003 .039 .044	
30			.047 .049 4 .007 .053 .056	.047 .044 10 .011 .066 .067					.047 .044 14 .010 .056 .067	
35			.064 .043 21 .025 .072 .118	.039 .041 4 .006 .043 .043					.051 .042 25 .024 .071 .117	
40										
45S										

LONGITUDE

TABLE VI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.536 .004 2 .536 .539 .540	.261 .188 7 .176 .532 .538			.322 .202 9 .304 .537 .540	70N
65						.424 .098 5 .463 .501 .501	.104 .117 9 .043 .191 .361	.064 .020 3 .076 .078 .080		.191 .181 17 .076 .428 .501	65
60							.218 .170 11 .087 .433 .507	.252 .222 28 .102 .526 .596		.242 .209 39 .097 .495 .594	60
55						.242 .043 4 .243 .262 .297	.075 .009 17 .073 .084 .090	.124 .117 42 .082 .256 .431		.118 .104 63 .082 .225 .416	55
50					.047 .009 2 .047 .080 .082	.345 .124 7 .377 .486 .490	.085 .037 41 .078 .125 .166	.184 .127 46 .105 .260 .458		.136 .119 96 .071 .247 .486	50
45	.114 .052 22 .100 .181 .220				.108 .067 16 .078 .187 .246	.111 .080 43 .079 .191 .306	.068 .011 7 .071 .078 .086	.146 .186 24 .094 .372 .518		.116 .100 112 .081 .197 .444	45
40	.101 .047 42 .089 .119 .256				.133 .106 22 .100 .214 .406	.077 .084 50 .060 .092 .287	.111 .083 17 .083 .130 .333			.099 .074 131 .080 .126 .320	40
35	.080 .027 24 .082 .113 .120		.048 .027 20 .035 .080 .099	.033 .004 3 .032 .037 .039	.069 .043 41 .060 .094 .184	.108 .095 16 .066 .249 .285				.072 .053 104 .059 .103 .276	35
30	.056 .024 15 .065 .070 .090	.053 .041 27 .071 .093 .106		.046 .019 30 .039 .068 .084	.070 .051 40 .060 .098 .204	.063 1				.058 .040 113 .056 .084 .154	30
25	.063 .006 7 .066 .068 .069	.068 .011 8 .066 .082 .085	.097 .026 3 .074 .088 .094	.050 .018 20 .048 .064 .090	.056 .031 34 .043 .098 .118					.057 .025 73 .053 .084 .106	25
20		.061 .011 8 .064 .068 .073	.074 .027 4 .067 .099 .112		.051 .023 32 .045 .074 .106					.055 .023 44 .050 .075 .110	20
15		.064 1	.035 .006 14 .035 .039 .049	.028 1	.035 .005 6 .035 .039 .041					.036 .007 22 .034 .040 .063	15
10		.030 .004 7 .031 .036 .035	.032 .009 15 .034 .041 .047	.024 .003 8 .025 .025 .026	.029 .006 3 .026 .034 .038					.029 .008 33 .026 .036 .045	10
5		.022 .005 6 .021 .024 .029		.025 .004 6 .026 .029 .031						.023 .005 12 .019 .026 .031	5
0		.023 .006 5 .019 .026 .032		.027 .002 2 .027 .026 .026						.024 .005 7 .025 .026 .032	0
5			.024 1	.026 .005 8 .023 .032 .033						.026 .005 6 .024 .031 .033	5
10											10
15				.036 .016 5 .036 .047 .062						.036 .016 5 .036 .047 .062	15
20	.053 1			.039 1						.046 .007 2 .046 .051 .053	20
25			.047 .004 5 .046 .052 .053	.059 1						.049 .006 6 .049 .054 .056	25
30			.052 .016 8 .046 .051 .057	.079 .030 5 .058 .110 .127						.062 .026 13 .051 .093 .122	30
35			.056 .046 10 .046 .061 .164	.053 .028 9 .043 .064 .117						.056 .039 19 .043 .067 .164	35
40			.063 1							.063 1	40
45S											45S

LONGITUDE

TABLE VI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(c) Flight level 330

CONE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65					.486 1	.327 1	.490 .113 22 .521 .575 .583			.483 .113 24 .516 .575 .583	65
60				.310 .239 8 .216 .600 .606	.324 .148 10 .407 .448 .463	.420 .087 12 .433 .486 .494	.456 .037 7 .467 .486 .506			.377 .153 37 .434 .489 .602	60
55				.200 .206 9 .092 .410 .618	.482 .187 9 .444 .611 .628	.299 .131 7 .307 .397 .484	.069 .014 15 .068 .084 .091	.172 .132 35 .152 .262 .558		.202 .176 75 .103 .414 .628	55
50				.151 .071 18 .123 .212 .296	.071 .042 18 .067 .123 .138	.068 .075 9 .038 .112 .233	.103 .092 71 .074 .139 .453	.136 .139 68 .087 .166 .567		.115 .109 184 .071 .164 .511	50
45	.144 .054 8 .118 .189 .254			.119 .077 35 .098 .183 .318	.071 .037 29 .069 .104 .155	.084 .060 13 .064 .107 .221	.132 .148 80 .072 .255 .539	.048 .005 7 .048 .053 .054		.113 .113 172 .069 .158 .507	45
40	.103 .065 30 .091 .151 .280		.053 .015 20 .050 .072 .078	.059 .025 12 .064 .083 .095	.059 .047 17 .051 .068 .183	.123 .117 32 .072 .229 .406	.100 .100 16 .060 .221 .300	.085 .021 2 .085 .099 .105		.090 .082 129 .064 .134 .375	40
35	.075 .034 33 .061 .113 .155		.072 .067 29 .057 .084 .250	.071 .032 20 .070 .082 .158	.074 .043 66 .061 .105 .202	.065 .035 29 .064 .088 .152				.073 .044 197 .061 .093 .192	35
30	.066 .026 18 .054 .106 .110	.069 .018 34 .066 .089 .108	.074 .009 8 .076 .082 .088	.184 1	.087 .081 135 .068 .106 .286	.044 .015 7 .037 .047 .075				.081 .063 203 .066 .103 .280	30
25	.054 .004 6 .051 .059 .059	.064 .018 31 .050 .061 .109	.075 .017 33 .077 .093 .096		.057 .031 120 .050 .083 .109	.077 .017 6 .072 .086 .102				.060 .028 195 .056 .064 .108	25
20	.058 .014 21 .062 .072 .076		.059 .019 4 .062 .077 .079	.037 .010 17 .039 .047 .049	.058 .026 23 .062 .075 .117					.052 .021 65 .050 .073 .082	20
15	.042 .015 15 .032 .061 .070		.050 1	.048 .006 6 .046 .051 .051	.048 .015 12 .040 .064 .078					.045 .014 34 .040 .051 .075	15
10	.031 .005 9 .032 .035 .038				.027 .018 3 .016 .041 .052					.030 .010 12 .032 .035 .049	10
5	.026 .010 9 .030 .040 .043			.022 .001 4 .022 .023 .024						.026 .009 13 .024 .033 .043	5
0	.020 1		.014 1	.026 .003 6 .027 .028 .029						.024 .005 7 .027 .028 .029	0
5	.032 .007 7 .030 .041 .042		.023 .005 6 .022 .029 .032	.025 .007 22 .027 .032 .036						.026 .008 35 .027 .034 .041	5
10	.025 .006 6 .025 .029 .033		.032 .009 11 .029 .039 .061	.032 .009 25 .036 .042 .044						.031 .009 42 .025 .041 .046	10
15	.031 .006 7 .034 .035 .035		.047 .004 7 .047 .048 .063	.028 .006 17 .028 .033 .036						.033 .009 31 .032 .043 .050	15
20			.048 .016 2 .048 .060 .065	.034 .012 25 .030 .040 .065						.035 .013 27 .030 .043 .066	20
25			.048 .020 15 .040 .051 .102	.039 .018 34 .034 .059 .068						.042 .018 49 .040 .058 .070	25
30			.084 .009 6 .086 .092 .093	.068 .045 42 .056 .065 .205						.070 .043 48 .058 .090 .205	30
35			.086 .033 10 .062 .090 .133	.064 .032 35 .063 .090 .142						.064 .032 45 .054 .080 .145	35
40											40
45S											45S

LONGITUDE

TABLE VI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N							.587 .017 6 .563 .598 .614	.602 .015 4 .597 .615 .625		.593 .016 9 .588 .613 .624
65					.412 .114 20 .381 .537 .573	.566 .033 12 .566 .593 .607	.598 1	.564 .103 14 .595 .655 .673		.600 .122 47 .545 .603 .670
60				.390 1	.304 .184 26 .272 .547 .618	.479 .134 50 .486 .607 .656		.933 .202 23 .270 .604 .622		.399 .184 100 .449 .604 .632
55				.409 .211 11 .546 .585 .622	.373 .189 51 .413 .566 .646	.356 .173 34 .407 .535 .617	.084 .043 14 .067 .120 .184	.181 .114 65 .116 .263 .449		.270 .192 175 .216 .531 .624
50				.232 .182 56 .126 .490 .610	.223 .178 89 .120 .436 .595	.218 .160 49 .113 .414 .564	.151 .147 112 .081 .317 .523	.194 .164 93 .114 .358 .637		.195 .167 379 .110 .390 585
45	.128 .035 25 .114 .170 .201			.081 .059 29 .056 .160 .216	.155 .170 57 .065 .384 .586	.201 .164 92 .111 .446 .529	.153 .130 65 .134 .225 .543	.165 .088 3 .110 .224 .271		.160 .146 271 .105 .294 .561
40	.221 .138 47 .173 .356 .527		.046 .021 33 .039 .072 .090	.066 .034 14 .048 .069 .136	.128 .123 128 .075 .266 .480	.103 .090 282 .077 .145 .415	.124 .074 6 .105 .163 .267	.311 .222 19 .172 .598 .672		.123 .116 531 .079 .197 511
35	.168 .118 39 .119 .278 .443		.090 .094 37 .053 .139 .414	.105 .066 42 .064 .191 .316	.090 .085 190 .065 .110 .462	.089 .040 60 .087 .125 .181				.100 .088 368 .067 .140 .420
30	.064 .014 12 .063 .076 .069	.073 .012 19 .076 .083 .090	.094 .047 24 .073 .150 .186	.052 .030 36 .044 .068 .136	.070 .046 299 .069 .093 .186	.068 1				.070 .044 391 .060 .093 .181
25	.053 .005 4 .053 .058 .059	.077 .018 31 .081 .090 .102	.061 .022 18 .064 .085 .093	.031 .014 27 .026 .047 .083	.057 .034 249 .061 .082 .159	.072 1				.057 .032 329 .052 .085 .141
20		.052 .020 32 .046 .072 .091	.069 .008 7 .070 .072 .080	.033 1	.051 .026 43 .050 .068 .105					.053 .022 83 .050 .072 .097
15		.063 .021 25 .046 .077 .090	.081 .009 6 .082 .089 .091		.038 .007 27 .038 .045 .060					.048 .020 58 .037 .077 .091
10		.034 .010 18 .030 .046 .050		.043 .017 6 .044 .061 .065	.031 .016 17 .029 .046 .061					.034 .014 41 .030 .046 .064
5		.025 .004 2 .025 .026 .029		.035 .014 26 .031 .051 .058	.020 .009 10 .019 .028 .036					.031 .014 38 .026 .050 .058
0		.024 .002 3 .025 .026 .027		.026 .010 42 .023 .037 .060	.010 1					.026 .010 46 .023 .037 .050
5		.018 .001 3 .019 .019 .019	.026 .011 24 .025 .030 .057	.026 .015 30 .023 .029 .063						.026 .013 57 .024 .030 .070
10		.021 .002 6 .021 .023 .026	.036 .010 11 .032 .045 .066	.029 .011 47 .025 .041 .067						.029 .011 64 .026 .041 .059
15		.027 .003 6 .027 .030 .032	.049 .010 13 .046 .059 .068	.034 .012 48 .029 .047 .058						.036 .013 67 .032 .030 .060
20	.054 .010 7 .056 .061 .065	.032 .008 4 .036 .037 .037	.044 .010 23 .040 .064 .081	.035 .021 33 .030 .049 .066						.040 .017 67 .037 .057 .078
25	.072 .015 8 .071 .081 .097		.046 .018 22 .037 .062 .083	.066 .023 41 .066 .088 .107						.060 .023 71 .061 .084 .106
30			.069 .013 10 .065 .083 .092	.084 .035 48 .078 .106 .176						.081 .033 58 .073 .105 .168
35			.110 .066 14 .114 .173 .196	.065 .027 26 .058 .102 .123						.081 .049 40 .061 .137 .183
40										
45S										

LONGITUDE

TABLE VI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.660 1	.597 .103 18 .629 .662 .668	.566 .014 6 .560 .581 .590		.592 .089 25 .613 .660 .668	70N
65					.493 .101 50 .525 .592 .614	.595 .068 31 .613 .649 .670	.486 .134 19 .553 .625 .634	.455 .175 24 .538 .599 .670		.510 .126 124 .502 .623 .667	65
60				.501 .079 18 .523 .568 .581	.382 .184 80 .440 .568 .646	.375 .210 69 .482 .580 .627	.501 .102 33 .504 .606 .671	.242 .193 46 .194 .545 .564		.379 .197 246 .250 .569 .648	60
55				.447 .156 96 .461 .593 .652	.401 .187 80 .452 .583 .660	.341 .138 110 .365 .491 .589	.378 .143 21 .382 .532 .592	.234 .179 38 .220 .459 .564		.372 .171 315 .366 .557 .638	55
50				.266 .159 42 .289 .405 .527	.355 .111 132 .389 .416 .514	.229 .154 82 .177 .406 .518	.164 .143 79 .093 .318 .512	.226 .202 57 .131 .537 .605		.262 .165 392 .192 .413 .572	50
45	.162 .036 2 .162 .186 .196		.460 .079 2 .460 .514 .536	.370 .134 146 .396 .487 .545	.192 .136 83 .148 .363 .509	.133 .101 113 .088 .239 .404	.252 .210 45 .191 .559 .651	.345 .238 16 .288 .656 .706		.253 .174 407 .214 .457 .637	45
40	.064 .034 15 .042 .105 .119		.173 .125 19 .104 .344 .366	.129 .100 103 .091 .205 .451	.144 .152 135 .071 .309 .597	.167 .149 909 .104 .333 .600	.124 .096 7 .096 .135 .324	.214 .199 17 .133 .409 .679		.161 .147 1205 .100 .310 .599	40
35	.038 .002 2 .038 .039 .039		.107 .068 28 .078 .140 .266	.085 .076 49 .068 .105 .309	.109 .108 408 .077 .132 .525	.095 .074 129 .071 .128 .343				.104 .098 616 .074 .133 .514	35
30			.140 .088 34 .109 .184 .383	.102 .075 37 .074 .178 .324	.081 .062 677 .064 .119 .266					.085 .065 748 .065 .125 .302	30
25		.037 .004 3 .039 .040 .041	.060 .015 7 .048 .078 .079	.046 .019 34 .045 .054 .092	.063 .031 511 .057 .083 .157	.051 .001 2 .051 .052 .052				.062 .031 557 .056 .082 .146	25
20		.035 .012 16 .035 .046 .054	.047 .017 17 .050 .062 .074	.049 .013 11 .047 .063 .070	.055 .024 80 .047 .079 112	.044 .004 5 .042 .048 .050				.050 .022 129 .045 .072 111	20
15		.041 .011 12 .040 .051 .058	.036 .010 13 .034 .048 .059		.038 .020 44 .035 .051 .091	.029 .009 6 .033 .037 .037				.038 .017 74 .031 .050 079	15
10		.032 .009 22 .034 .040 .047	.042 .005 15 .042 .048 .051	.022 .002 7 .022 .024 .026	.034 .010 45 .034 .040 .056					.034 .010 89 .034 .043 .056	10
5		.023 .003 5 .023 .025 .026		.030 .015 21 .022 .053 .059	.031 .011 41 .035 .042 .047					.030 .012 67 .028 .043 .058	5
0				.033 .013 24 .032 .046 .059	.035 .009 22 .034 .044 .050					.034 .011 46 .026 .046 .054	0
5				.026 .012 25 .025 .037 .049	.036 .008 20 .035 .046 .060					.031 .012 45 .029 .043 .050	5
10				.030 .014 21 .026 .043 .056	.047 .013 6 .050 .058 .058					.034 .015 27 .032 .052 .058	10
15		.030 .003 2 .030 .031 .032		.029 .012 16 .027 .043 .051						.029 .012 18 .027 .038 051	15
20				.030 .011 29 .030 .041 .051						.030 .011 29 .030 .041 .051	20
25				.022 .015 32 .021 .034 .059						.022 .015 32 .021 .034 059	25
30		.044 .004 8 .044 .047 .050	.066 .016 13 .072 .082 .088	.082 .032 21 .086 .109 .148						.071 .029 42 .054 .093 144	30
35			.097 .052 31 .086 .143 .220	.106 .053 11 .101 .140 .212						.100 .053 42 .077 .146 .229	35
40			.267 1							.257 1	40
45S											45S

LONGITUDE

TABLE VI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.590 .628 .094 .667 40 .683	.562 .603 .114 .656 97 .691	.477 .521 .103 .568 6 .568		.566 .601 .111 .659 143 .691
65				.603 .598 .162 .739 8 .746	.549 .531 .064 .623 109 .724	.556 .577 .092 .638 109 .697	.552 .571 .094 .636 111 .682	.431 .493 .152 .581 46 .606		.539 .549 .106 .630 379 .708
60				.533 .523 .106 .684 47 .699	.582 .587 .082 .630 89 .681	.535 .550 .113 .643 137 .691	.529 .545 .117 .637 56 .673	.381 .434 .161 .541 69 .614		.513 .519 .133 .636 398 .686
55				.432 .464 .216 .650 52 .699	.299 .306 .134 .476 22 .494	.529 .579 .124 .633 104 .669	.484 .626 .224 .647 3 .656	.434 .450 .108 .523 43 .611		.465 .426 .167 .626 224 .689
50				.463 .532 .191 .675 33 .729	.177 .181 .104 .284 41 .397	.365 .381 .168 .544 55 .620	.110 .105 .040 .145 16 .184	.425 .465 .131 .550 12 .594		.315 .290 .194 .546 157 .690
45			.445 .492 .177 .590 8 .647	.335 .343 .163 .515 67 .633	.328 .328 .198 .526 89 .648	.270 .224 .159 .410 70 .592	.092 .075 .039 .100 28 .199	.117 .113 .035 .144 20 .194		.276 .174 .183 .503 262 .644
40			.294 .326 .176 .439 28 .577	.136 .068 .130 .243 78 .491	.330 .395 .167 .497 80 .592	.196 .118 .171 .359 127 .667	.172 .125 .112 .256 5 .367	.458 .458 .047 .490 2 .503		.203 .121 .173 .411 684 .659
35			.108 .062 .127 .146 28 .486	.062 .066 .028 .085 31 .116	.082 .061 .073 .096 61 .307	.112 .066 .078 .187 284 .295				.103 .076 .078 .159 404 .310
30			.074 .079 .021 .094 6 .096	.042 .036 .023 .064 55 .116	.106 .075 .117 .156 96 .458	.051 .049 .007 .057 7 .061				.083 .038 .096 .096 164 .451
25			.078 .075 .004 .061 7 .086	.021 .020 .008 .026 4 .031	.084 .058 .078 .126 82 .366	.051 .051 .006 .056 7 .060				.078 .057 .070 .118 100 .355
20		.006 .004 .006 .011 3 .015	.084 .085 .002 .066 3 .086		.084 .081 .042 .134 22 .183	.024 .026 .007 .029 6 .034				.067 .056 .045 .108 34 .182
15		.070 1			.041 .037 .017 .064 26 .073	.012 .012 .005 .015 2 .016				.040 .037 .019 .065 29 .073
10				.037 .037 .002 .039 3 .040	.030 .026 .009 .039 31 .048					.030 .029 .009 .039 34 .048
5				.039 1	.037 .037 .014 .045 26 .069					.037 .038 .014 .045 27 .068
0				.019 .018 .005 .023 3 .026	.031 .029 .013 .043 29 .055					.030 .027 .013 .042 32 .055
5				.029 1	.039 .040 .011 .049 22 .058					.038 .039 .010 .049 23 .057
10				.029 .027 .012 .037 27 .060	.031 .030 .006 .036 7 .039					.030 .027 .011 .037 34 .056
15		.031 .031 .004 .034 5 .037		.036 .032 .013 .047 37 .069						.035 .032 .013 .045 42 .069
20	.030 1	.027 .027 .001 .028 2 .028		.049 .049 .015 .062 21 .079						.047 .047 .016 .061 24 .079
25				.067 .055 .010 .056 8 .076						.067 .055 .010 .056 8 .076
30				.064 .058 .022 .086 10 .106						.064 .058 .022 .086 10 .106
35			.131 .132 .025 .156 4 .159	.174 .186 .086 .280 79 .381						.172 .176 .084 .248 83 .380
40										
45S										

LONGITUDE

TABLE VI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.536 .108 11 .809 .634 .740	.620 .140 17 .660 .735 .778			.593 .136 28 .627 .729 .771	70N
65						.523 .136 21 .577 .661 .687	.471 .185 68 .465 .607 .705	.434 .177 27 .498 .620 .645		.472 .177 116 .494 .653 .703	65
60				.561 .098 30 .528 .700 .758		.536 .127 41 .564 .664 .723	.486 .183 76 .491 .667 .731	.440 .162 127 .436 .632 .696		.480 .158 274 .386 .644 .731	60
55				.476 .173 43 .488 .651 .743		.463 .147 63 .515 .624 .670	.629 1	.445 .112 78 .465 .570 .626		.466 .142 185 .474 .617 .699	55
50				.503 .122 47 .513 .611 .708	.429 .050 18 .407 .493 .528	.401 .144 132 .400 .570 .659	.525 .144 13 .573 .683 .705	.242 .074 2 .242 .291 .312		.432 .142 212 .425 .581 .700	50
45	.561 .068 8 .578 .534 .639		.096 .059 9 .069 .156 .213	.272 .186 32 .217 .533 .626	.219 .122 51 .170 .369 .467	.369 .149 133 .376 .537 .623	.335 .141 4 .334 .473 .505	.421 .021 2 .421 .434 .440		.320 .169 239 .346 .506 .632	45
40	.601 .091 12 .604 .674 .686		.148 .186 36 .061 .313 .624	.198 .181 15 .063 .411 .471	.303 .177 53 .316 .498 .563	.290 .187 97 .282 .506 .643				.281 .203 223 .265 .517 .650	40
35	.124 .078 7 .101 .113 .288		.259 .193 36 .231 .467 .567	.078 1	.099 .051 10 .101 .149 .156	.243 .190 14 .178 .485 .564				.215 .180 68 .111 .460 .573	35
30	.057 .006 4 .055 .062 .065		.210 .180 21 .180 .426 .636		.085 .043 32 .087 .120 .171					.129 .130 57 .098 .185 .601	30
25			.090 .022 22 .097 .119 .119		.062 .066 42 .042 .131 .360					.085 .072 64 .054 .119 .303	25
20		.015 .004 4 .014 .019 .022	.086 .013 9 .090 .096 .102		.046 .018 18 .042 .055 .091					.054 .028 31 .047 .090 .102	20
15		.023 .005 11 .023 .027 .033	.079 .008 2 .079 .084 .086		.030 .008 7 .028 .031 .041					.031 .017 20 .023 .034 .080	15
10					.027 1					.027 1	10
5											5
0											0
5											5
10											10
15											15
20				.063 .008 3 .061 .070 .073						.063 .008 3 .061 .070 .073	20
25				.073 .015 15 .071 .090 .093						.073 .015 15 .071 .090 .093	25
30				.123 .039 10 .111 .119 .218						.123 .039 10 .111 .119 .218	30
35				.264 .111 45 .252 .385 .463						.264 .111 45 .252 .385 .463	35
40											40
45S											45S

LONGITUDE

TABLE VI. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60						.813 .841 .104 .710 23 .791	.643 .643 .004 .646 2 .647			.815 .841 .100 .705 25 .790
55				.454 .472 .075 .505 31 .509		.405 .455 .159 .666 15 .663				.436 .457 .112 .507 46 .621
50				.375 .431 .111 .459 45 .471	.434 .408 .147 .596 8 .617	.345 .254 .196 .614 6 .618				.380 .425 .129 .462 59 .617
45			.213 .096 .174 .442 17 .558	.200 .118 .151 .338 44 .569		.322 .236 .179 .544 13 .677	.476 .476 .105 .583 8 .605			.249 .140 .179 .456 82 .622
40			.164 .079 .176 .468 57 .539	.105 .100 .007 .115 9 .116	.213 .215 .095 .300 4 .334	.256 .238 .110 .356 27 .466	.139 .139 .006 .142 2 .144			.185 .096 .154 .351 99 .541
35			.101 .082 .047 .094 13 .227	.094 1	.059 .059 .003 .082 6 .064	.122 .129 .049 .171 11 .185				.101 .074 .046 .154 30 .214
30					.188 .187 .110 .211 13 .440	.475 1				.209 .171 .129 .383 14 .469
25										
20			.094 .094 .002 .095 2 .096							.094 .094 .002 .095 2 .096
15		.074 1	.078 .075 .010 .085 8 .097							.078 .074 .009 .084 9 .097
10										
5										
0										
5										
10										
15										
20										
25				.096 1						.096 1
30				.101 .103 .012 .109 7 .118						.101 .103 .012 .109 7 .118
35				.115 .108 .012 .124 3 .131						.115 .108 .012 .124 3 .131
40										
45S										

LONGITUDE

TABLE VII. - GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(a) Flight level 290

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

JULY
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65					.097 1		.086 .080 .080 .018 .093 6 .116	.082 .078 .015 .095 4 .103		.065 .080 .015 .100 11 .116	65
60							.130 .130 .013 .138 2 .142	.068 .066 .004 .071 3 .073		.092 .073 .031 .126 5 140	60
55								.095 .093 .022 .116 4 .126		.095 .093 .022 .116 4 126	55
50								.093 .072 .089 .089 18 .344		.093 .072 .089 .089 18 344	50
45	.078 .080 .026 .095 20 .132				.055 .042 .029 .076 4 .101	.079 .079 .006 .083 2 .085	.110 .110 .004 .112 2 .113	.074 .070 .016 .082 6 .104		.076 .066 .025 .103 36 123	45
40	.082 .067 .030 .122 15 .135				.082 .094 .028 .100 4 .105	.079 .076 .018 .095 13 13	.083 .103 .043 .114 6 .126			.081 .056 .029 .111 38 131	40
35	.061 .054 .030 .067 37 .144		.061 1		.058 .059 .018 .076 8 .082	.077 .066 .035 .120 11 .136				.064 .055 .030 .076 57 .136	35
30	.068 .067 .004 .072 4 .075									.068 .067 .004 .072 4 .075	30
25	.056 .048 .019 .076 7 .089	.045 .045 .013 .053 2 .057	.056 .055 .005 .060 3 .063		.040 .042 .013 .054 7 .058					.049 .050 .017 .056 19 .085	25
20		.033 .032 .008 .041 19 .044			.042 .044 .014 .056 12 .063					.037 .039 .012 .046 31 .060	20
15		.022 .022 .003 .025 4 .025	.040 .041 .006 .044 10 .050	.027 1		.019 1				.033 .036 .010 .043 16 .049	15
10		.028 .027 .006 .032 9 .040	.026 .033 .012 .040 7 .040							.027 .027 .009 .037 16 .041	10
5		.023 .025 .004 .025 6 .027	.013 .013 .001 .014 6 .014							.018 .015 .006 .025 12 .027	5
0		.029 1	.013 .012 .003 .016 8 .017							.014 .012 .006 .017 9 .027	0
5			.016 .017 .002 .018 18 .020							.016 .017 .002 .018 18 .020	5
10			.018 .018 .004 .023 6 .026							.019 .018 .004 .023 8 .026	10
15			.027 .026 .004 .026 7 .036	.019 1						.026 .024 .005 .026 8 .035	15
20											20
25			.052 .052 .007 .060 13 .063							.052 .052 .007 .060 13 .063	25
30			.048 .049 .019 .053 12 .092							.048 .049 .019 .053 12 .092	30
35			.045 .045 .009 .051 2 .054	.076 .083 .019 .091 4 .093						.065 .061 .022 .089 6 .093	35
40											40
45S											45S

LONGITUDE

TABLE VII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(b) Flight level 310

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

JULY
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65							.088 .088 .006 .092 2 .094	.090 .091 .015 .104 8 .108		.089 .088 .014 .103 10 .108
60							.107 .103 .014 .122 5 .128	.099 .102 .020 .114 15 .137		.101 .095 .019 .118 20 .137
55						.057 .057 .004 .061 5 .062	.089 .096 .011 .097 3 .098	.126 .102 .077 .175 35 .324		.115 .096 .073 .148 43 .322
50					.079 .083 .022 .098 8 .105	.075 .056 .030 .088 3 .116	.127 .117 .063 .184 14 .228	.089 .086 .026 .113 32 .146		.096 .084 .042 .123 57 .219
45	.212 .252 .091 .283 3 .296				.052 .051 .008 .060 4 .063	.094 .083 .033 .127 48 .169	.063 .069 .031 .089 20 .110	.084 .084 .003 .086 2 .087		.088 .079 .045 .114 77 .221
40	.086 .081 .030 .098 9 .146				.099 .099 .010 .105 2 .108	.073 .074 .028 .103 75 .128	.086 .086 .047 .101 7 .162	.070 .070 .003 .072 2 .073		.075 .075 .030 .103 95 .140
35	.056 .052 .021 .065 38 .108		.058 .054 .028 .089 10 .102		.085 .081 .029 .093 27 .123	.092 1				.060 .044 .025 .079 76 .123
30	.058 .058 .008 .065 25 .070	.051 .051 .013 .060 32 .078			.048 .042 .019 .072 20 .085					.052 .051 .014 .064 77 .084
25	.056 .058 .012 .065 15 .080	.043 .035 .027 .065 26 .119		.052 .052 .007 .061 8 .064	.042 .036 .018 .051 27 .092					.046 .035 .021 .061 76 .092
20		.034 .032 .010 .039 17 .058	.013 1	.054 .051 .017 .073 45 .091	.038 .035 .012 .062 29 .087					.045 .039 .017 .064 92 .079
15			.022 .021 .011 .030 7 .041	.022 1	.017 .019 .003 .018 6 .020	.053 1				.022 .019 .012 .028 15 .050
10		.029 1	.009 1		.021 .021 .001 .021 2 .021					.020 .015 .007 .025 4 .029
5										
0		.024 .024 .002 .025 3 .026					.028 .028 .003 .030 4 .032			.026 .026 .003 .026 7 .032
5		.025 .025 .004 .026 6 .031	.026 .023 .005 .029 4 .033				.033 .033 .001 .033 2 .033			.026 .023 .005 .032 12 .034
10		.026 .027 .004 .030 10 .033	.021 .022 .003 .024 6 .026							.024 .021 .005 .028 18 .033
15		.036 .037 .008 .043 13 .048	.024 .024 .005 .029 18 .034							.029 .029 .008 .037 31 .046
20		.047 .045 .012 .062 12 .067	.030 .030 .005 .035 37 .041	.024 .024 .005 .027 5 .030						.033 .031 .011 .040 54 .063
25			.042 .036 .021 .061 47 .092	.025 .024 .002 .026 7 .028						.040 .034 .020 .058 54 .087
30			.063 .059 .023 .092 40 .110	.049 .034 .025 .069 8 .094						.060 .055 .024 .090 48 .108
35			.087 .067 .061 .151 20 .238	.044 .059 .022 .060 3 .060						.081 .057 .059 .146 23 .234
40			.095 1							.095 1
45S										

LONGITUDE

TABLE VII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N							.417 .504 163 .564 9 .590			.417 .504 163 .564 9 .590	70N
65							.196 .107 153 .314 3 .400	.188 .188 015 .188 2 .202		.193 .173 119 .278 5 .395	65
60						.150 .135 061 .182 11 .289	.220 .214 056 .276 8 .317	.147 .089 105 .237 19 .392		.163 .132 090 .232 38 .375	60
55				.193 .077 165 .314 3 .412	.082 1	.056 .056 001 .056 2 .056	.211 .150 130 .397 40 .467	.239 .134 170 .464 60 .565		.222 .109 156 .422 106 .546	55
50				.088 .077 025 .106 14 .147		.088 .092 013 .100 5 .105	.160 .118 109 .225 75 .433	.193 .148 118 .346 44 .427		.161 .112 109 .311 138 .432	50
45	.092 1			.110 .087 065 .174 26 .263	.071 .058 022 .100 8 .105	.090 .083 039 .102 24 .197	.129 .127 029 .153 36 .188			.110 .101 048 .146 93 .249	45
40	.093 .083 048 .130 31 .216		.070 .065 038 .089 28 .175	.090 .084 062 .174 8 .199	.123 .112 040 .169 9 .183	.090 .081 046 .113 34 .197	.102 .098 018 .117 10 .140	.073 1		.090 .082 046 .125 121 .213	40
35	.060 .054 025 .081 28 .125		.089 .062 043 .112 14 .164	.115 .115 020 .129 2 .134	.067 .056 042 .095 99 .162	.077 .078 034 .105 14 .145				.067 .056 039 .099 157 .161	35
30	.057 .055 010 .064 23 .072	.065 .066 011 .062 43 .078			.056 .044 039 .089 145 .166	.121 .127 021 .136 14 .152				.081 .053 035 .090 228 .159	30
25		.040 .036 009 .050 39 .056		.064 1	.051 .042 033 .078 120 .141	.109 .107 017 .125 14 .144				.053 .041 033 .089 174 .142	25
20		.037 .036 005 .040 10 .042	.030 .018 030 .043 5 .064	.035 .029 021 .055 48 .098	.049 .050 018 .062 17 .074	.100 .102 016 .114 8 .124				.043 .030 027 .065 88 .111	20
15		.030 .030 006 .034 7 .041	.025 .026 009 .033 11 .043	.038 .030 023 .054 41 .100		.063 .060 012 .071 5 .082				.037 .026 021 .055 84 .094	15
10		.025 .025 006 .029 17 .037	.018 .017 001 .018 3 .019				.041 1			.025 .024 007 .030 21 .041	10
5		.027 .028 006 .033 6 .034	.019 .019 005 .024 5 .027							.024 .026 007 .029 13 .034	5
0		.025 .025 007 .033 13 .034	.017 .017 002 .019 10 .021	.024 .024 008 .029 4 .031						.022 .019 006 .030 27 .034	0
5		.029 .025 008 .036 7 .038	.022 .019 004 .026 9 .026	.018 .019 002 .019 8 .019						.023 .019 006 .026 24 .037	5
10		.029 .029 008 .032 9 .035	.024 .025 005 .030 12 .033	.024 .021 008 .034 10 .037						.025 .026 007 .032 31 .036	10
15		.028 .029 004 .031 5 .033	.026 .023 005 .031 8 .034	.028 .031 005 .031 5 .032						.027 .027 005 .031 16 .034	15
20		.031 .033 007 .038 12 .041	.038 .036 014 .055 18 .066	.030 .024 009 .041 8 .044						.034 .029 012 .042 36 .063	20
25			.056 .056 022 .068 26 .111	.050 .051 017 .069 15 .078						.053 .053 020 .070 41 .109	25
30			.076 .072 019 .096 24 .114	.069 .067 029 .102 25 .131						.072 .066 025 .101 49 .122	30
35			.071 .062 027 .097 32 .138	.148 .081 148 .220 8 .464						.087 .059 077 .106 40 .288	35
40			.091 .091 026 .109 2 .116							.091 .091 025 .109 2 .116	40
45S											45S

LONGITUDE

TABLE VII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N							.559 .051 11 .555 .626 .637			.559 .051 11 .555 .626 .637
65				.117 1	.388 .094 28 .413 .451 .461	.309 .182 13 .422 .490 .501	.306 .133 14 .348 .428 .481	.317 .192 13 .424 .509 .548		.339 .150 69 .411 .466 .522
60				.377 .145 12 .375 .533 .576	.075 .008 6 .073 .083 .088	.385 .183 62 .454 .561 .600	.212 .080 8 .222 .278 .315	.231 .159 63 .158 .396 .608		.300 .165 149 .266 .529 .604
55				.173 .076 15 .140 .261 .326	.219 .195 17 .101 .458 .567	.323 .156 72 .297 .514 .589	.297 .177 22 .404 .453 .490	.136 .101 75 .101 .185 .497		.230 .168 201 .154 .464 .561
50				.071 .067 14 .050 .126 .234	.260 .178 12 .232 .523 .532	.176 .145 73 .103 .380 .489	.225 .156 84 .139 .448 .510	.206 .156 93 .143 .429 .554		.200 .156 276 .118 .428 .546
45	.157 .129 60 .097 .294 .535			.068 .054 38 .047 .097 .206	.203 .176 22 .137 .445 .536	.106 .061 78 .081 .148 .357	.136 .083 47 .114 .144 .472	.299 .160 6 .318 .456 .468		.131 .115 251 .091 .200 .505
40	.098 .058 93 .083 .137 .278		.061 .017 13 .057 .076 .094	.126 .084 11 .083 .225 .278	.123 .092 99 .095 .185 .423	.086 .053 152 .077 .113 .231	.117 .047 11 .103 .144 .219			.099 .069 379 .081 .141 .319
35	.054 .017 43 .050 .074 .087		.075 .034 10 .067 .104 .123	.058 .007 9 .051 .063 .068	.079 .050 198 .068 .120 .233	.076 .097 39 .064 .115 .147				.075 .045 299 .063 .113 .223
30	.074 .016 13 .071 .089 .107	.062 .013 9 .057 .075 .086	.091 .002 6 .091 .093 .094	.076 .026 15 .072 .111 .122	.055 .038 311 .047 .081 .184					.058 .037 356 .052 .085 .181
25	.038 .003 5 .037 .041 .043	.080 .006 9 .081 .088 .092	.073 .026 12 .077 .093 .108	.068 .037 24 .062 .106 .151	.060 .030 265 .044 .077 .115	.131 .011 6 .128 .137 .150				.055 .032 321 .047 .087 .131
20		.034 .018 16 .026 .046 .076	.042 .036 7 .025 .093 .100	.044 .020 60 .039 .067 .084	.040 .020 62 .032 .056 .098	.088 .033 10 .105 .119 .121				.044 .025 155 .036 .067 .118
15		.031 .007 26 .030 .036 .044	.034 .013 62 .036 .045 .062	.029 .009 34 .028 .042 .046	.042 .020 22 .037 .056 .092	.049 .007 19 .048 .057 .064				.035 .014 163 .034 .047 .068
10		.026 .006 22 .026 .031 .042	.022 .007 11 .021 .030 .034	.018 .002 3 .018 .020 .021	.033 .004 11 .033 .036 .043	.052 .006 8 .053 .058 .060	.045 .016 10 .044 .066 .079			.032 .013 65 .030 .046 .059
5		.026 .004 21 .027 .029 .032	.023 .003 9 .023 .025 .028	.019 .002 4 .019 .020 .021	.056 .017 7 .064 .069 .072		.024 .002 4 .024 .026 .028			.029 .014 45 .025 .031 .069
0		.027 .008 18 .027 .032 .048	.020 .007 19 .018 .030 .033	.019 .002 7 .020 .020 .021	.029 .008 7 .029 .036 .039		.026 .004 3 .024 .029 .031			.024 .008 54 .021 .031 .040
5		.022 .006 21 .023 .026 .034	.015 .003 22 .016 .019 .021	.018 .003 8 .018 .020 .022	.030 .004 2 .030 .033 .034					.019 .006 51 .018 .025 .034
10		.021 .003 12 .021 .023 .027	.018 .004 26 .017 .022 .026	.021 .000 3 .021 .021 .021						.019 .004 41 .019 .022 .028
15		.028 .008 16 .026 .032 .047	.027 .006 29 .028 .033 .034	.048 .028 12 .048 .067 .084						.031 .016 57 .028 .035 .091
20		.033 .006 14 .033 .035 .047	.033 .013 17 .028 .044 .065	.059 .037 17 .057 .084 .131						.042 .026 48 .031 .062 .116
25			.062 .015 20 .063 .066 .079	.046 .030 28 .047 .083 .107						.049 .025 46 .031 .068 .103
30			.097 .042 17 .090 .135 .199	.081 .064 41 .078 .145 .230						.086 .059 58 .062 .142 .229
35			.098 .062 73 .085 .130 .391	.172 .094 21 .141 .306 .336						.114 .091 94 .069 .189 .385
40			.111 .025 3 .114 .132 .140							.111 .025 3 .114 .132 .140
45S										

LONGITUDE

TABLE VII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 370

LAT	15E			60E			105E			150E			165W			120W			75W			30W			15E			LAT
																									MEAN			
70N																.507 .533	.102 .681	17 .612	.426 .463	.144 .565	28 .635				.456 .507	.135 .586	45 .630	70N
65													.322 .320	.167 .522	55 .573	.528 .545	.086 .696	21 .620	.362 .406	.129 .513	43 .562	.322 .315	.164 .516	30 .551	.368 .377	.163 .534	149 .604	65
60										.394 .465	.153 .509	20 .620	.353 .369	.166 .532	70 .570	.452 .476	.106 .564	33 .614	.374 .433	.145 .502	33 .549	.305 .314	.192 .490	33 .616	.370 .414	.165 .531	189 .613	60
55										.262 .247	.167 .460	59 .535	.176 .105	.149 .381	26 .469	.454 .494	.111 .627	45 .572	.369 .433	.143 .519	67 .554	.302 .292	.139 .460	45 .522	.331 .254	.169 .516	242 .555	55
50										.205 .129	.160 .373	75 .564	.249 .137	.201 .511	49 .616	.196 .167	.137 .311	44 .534	.268 .211	.153 .466	46 .527	.197 .225	.106 .316	24 .327	.224 .112	.162 .432	238 .564	50
45								.090		1	.178 .109	.155 .426	79 .517	.168 .096	.157 .382	29 .493	.144 .116	.081 .228	73 .343	.159 .127	.121 .247	66 .526	.112 .118	.022 .123	8 .143	.160 .094	.127 .269	258 .510	45
40	.128 .096	.069 .194	12 .262	.047		1	.070 .069	.032 .099	37 .139	.130 .096	.102 .163	27 .407	.097 .071	.081 .136	52 .340	.092 .083	.064 .121	395 .300	.142 .109	.099 .185	14 .402				.095 .081	.069 .124	538 .339	40
35	.088 .105	.029 .112	5 .116				.117 .114	.064 .158	17 .283	.077 .074	.025 .103	12 .122	.072 .066	.044 .100	238 .178	.088 .092	.068 .142	57 .266							.080 .071	.051 .113	329 .270	35
30	.081 .079	.006 .087	5 .068	.071 .070	.007 .077	3 .080				.066 .062	.031 .076	16 .146	.065 .053	.047 .090	447 .235	.050 .047	.017 .065	3 .072							.065 .054	.046 .086	474 .228	30
25				.043 .047	.012 .063	14 .057	.049 .047	.012 .061	4 .064	.084 .059	.059 .175	12 .181	.048 .040	.030 .075	387 .129										.048 .041	.031 .074	417 .146	25
20				.037 .036	.016 .048	19 .077	.042 .042	.006 .049	15 .060	.089 .080	.037 .097	84 .139	.048 .044	.028 .071	66 .098	.082 .066	.022 .102	5 .119							.054 .048	.032 .081	159 .122	20
15				.026 .024	.007 .034	7 .038	.039 .038	.012 .050	39 .066	.041 .034	.016 .053	4 .067	.034 .042	.014 .047	13 .056	.055 .054	.010 .065	18 .075	.030 .030	.007 .036	3 .039				.040 .033	.014 .056	84 .070	15
10				.016		1				.023 .022	.007 .029	3 .032	.025 .027	.013 .037	28 .061	.066 .062	.013 .077	11 .093	.063 .060	.022 .063	14 .106				.043 .023	.025 .067	54 .096	10
5				.021 .021	.002 .023	13 .024				.027 .022	.008 .034	13 .041	.043 .041	.019 .057	24 .082										.033 .023	.017 .051	50 .068	5
0										.032 .037	.008 .038	6 .041	.048 .040	.016 .066	15 .077										.043 .037	.016 .065	21 .077	0
5										.034 .036	.004 .037	6 .040	.028 .028	.012 .036	26 .055										.029 .029	.012 .036	32 .054	5
10										.042 .048	.014 .055	21 .068	.038 .042	.013 .053	7 .065										.041 .041	.014 .054	28 .068	10
15										.039 .043	.012 .046	17 .061													.039 .043	.012 .048	17 .061	15
20							.025 .025	.003 .027	2 .028	.042 .045	.008 .049	11 .063													.040 .043	.010 .047	13 .053	20
25							.025 .024	.004 .027	6 .032	.051 .051	.004 .054	6 .058													.038 .034	.013 .051	12 .058	25
30							.063 .053	.030 .094	6 .113	.158		1													.077 .054	.043 .118	7 .153	30
35							.139 .127	.063 .204	84 .281	.264 .184	.186 .337	40 .720													.187 .116	.140 .270	104 .695	35
40							.103 .082	.042 .132	4 .170																.103 .082	.042 .132	4 .170	40
45S																												45S

LONGITUDE

TABLE VII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.577 .093 9 .578 .674 .679	.574 .074 12 .564 .652 .665			.575 .083 21 .561 .664 .678	70N
65				.414 .016 3 .416 .426 .431	.399 .165 95 .469 .549 .602	.540 .106 41 .564 .626 .680	.441 .171 29 .517 .601 .629	.593 .004 3 .593 .596 .598		.444 .163 171 .503 .589 .664	65
60				.419 .148 82 .460 .555 .620	.386 .155 85 .338 .534 .608	.509 .103 62 .504 .602 .686	.476 .129 69 .503 .614 .670	.370 .174 30 .342 .582 .610		.434 .150 338 .407 .578 .657	60
55				.364 .155 66 .366 .534 .614	.315 .115 36 .311 .417 .557	.448 .156 81 .629 .585 .641	.326 .163 49 .315 .526 .633	.260 .107 100 .292 .373 .465		.348 .156 332 .325 .538 .630	55
50				.256 .186 128 .180 .494 .562	.333 .192 98 .348 .540 .594	.315 .165 45 .287 .545 .588	.182 .126 51 .153 .316 .517	.292 .111 48 .315 .403 .443		.277 .176 367 .254 .508 .577	50
45			.089 .021 4 .104 .118 .121	.184 .145 96 .115 .378 .538	.197 .135 52 .157 .340 .476	.252 .190 14 .135 .491 .554	.163 .120 62 .127 .226 .542	.389 .095 8 .396 .482 .534		.191 .144 236 .124 .381 .543	45
40	.062 .009 10 .084 .087 .078		.065 .024 17 .083 .114 .118	.108 .063 55 .089 .178 .268	.140 .101 24 .077 .253 .313	.124 .060 167 .097 .160 .370	.154 .048 5 .137 .211 .213			.118 .077 278 .089 .167 .339	40
35	.092 .011 4 .086 .100 .110		.096 .068 19 .086 .107 .262	.082 .086 28 .069 .081 .290	.082 .034 23 .061 .128 .136	.087 .052 82 .065 .156 .225	.119 .023 6 .127 .136 .145			.093 .060 142 .063 .126 .226	35
30	.085 .011 3 .081 .094 .099	.066 .017 5 .057 .079 .094			.107 .093 87 .078 .179 .411	.129 .016 14 .127 .143 .169	.078 .002 3 .078 .079 .080			.107 .083 112 .077 .165 .395	30
25		.051 .005 8 .051 .052 .061	.045 .008 8 .046 .046 .061		.073 .089 46 .052 .076 .436	.133 .008 6 .134 .139 .144				.074 .076 70 .060 .127 .341	25
20		.067 .002 2 .067 .068 .069	.042 .008 18 .041 .050 .067		.031 .018 11 .018 .052 .060	.117 1				.042 .021 30 .036 .056 .089	20
15			.030 .006 8 .029 .037 .040		.055 .022 15 .064 .084 .103					.047 .022 23 .043 .063 .095	15
10					.041 .011 23 .038 .049 .068					.041 .011 23 .038 .049 .066	10
5					.049 .010 25 .049 .058 .070					.049 .010 25 .049 .058 .070	5
0					.035 .028 31 .027 .052 .080					.035 .026 31 .027 .052 .090	0
5					.035 .018 26 .042 .050 .063					.035 .016 26 .042 .050 .063	5
10				.026 .017 23 .026 .045 .083	.038 .020 5 .049 .058 .068					.028 .016 26 .027 .049 .056	10
15				.026 .015 17 .028 .035 .066						.026 .015 17 .028 .035 .058	15
20				.046 .036 12 .031 .086 .125						.046 .036 12 .031 .086 .125	20
25				.061 .070 11 .011 .151 .161						.061 .070 11 .011 .151 .161	25
30			.139 .027 16 .144 .162 .176	.045 .027 7 .060 .069 .106						.110 .053 23 .137 .153 .175	30
35			.210 .119 6 .147 .350 .403	.116 .091 22 .096 .231 .262						.136 .105 28 .091 .235 .370	35
40											40
45S											45S

LONGITUDE

TABLE VII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.188 .107 6 .131 .256 .394	.502 1				.233 .148 7 .140 .418 .491
60				.386 .077 2 .386 .438 .459		.428 .137 14 .422 .570 .623	.487 .117 50 .511 .605 .684	.358 .128 25 .345 .491 .595		.441 .134 91 .457 .571 .679
55				.311 .182 36 .316 .520 .558		.483 .108 36 .520 .567 .601	.413 .140 48 .507 .576 .607	.460 .145 63 .511 .574 .646		.430 .157 103 .501 .566 .642
50				.228 .098 66 .228 .320 .456	.183 .140 8 .133 .179 .494	.309 .183 111 .270 .560 .602	.283 .188 24 .246 .434 .598	.341 .091 16 .346 .400 .541		.280 .159 224 .170 .481 .598
45	.350 .112 7 .337 .464 .508		.152 .094 14 .118 .239 .374	.209 .110 78 .207 .288 .475	.267 .155 79 .231 .477 .561	.207 .118 96 .166 .316 .533	.362 .110 2 .362 .436 .467	.091 .007 8 .090 .093 .106		.223 .132 284 .160 .357 .540
40	.209 .135 11 .167 .312 .499		.100 .041 56 .069 .116 .248	.266 .190 14 .223 .504 .810	.193 .117 82 .166 .274 .494	.189 .103 80 .130 .244 .451	.314 1			.162 .115 214 .101 .250 .507
35	.058 .009 6 .056 .069 .071		.079 .021 14 .063 .099 .110		.076 .035 11 .060 .114 .132	.127 .079 23 .093 .170 .338				.096 .061 54 .067 .128 .277
30	.053 .004 6 .051 .057 .069				.066 .022 31 .059 .090 .117					.063 .020 37 .057 .085 .116
25					.065 .020 29 .061 .089 .106					.065 .020 29 .061 .089 .106
20					.059 .023 27 .064 .077 .105					.059 .023 27 .064 .077 .105
15					.034 .016 14 .039 .054 .068					.036 .016 14 .037 .054 .068
10					.037 .003 4 .036 .039 .041					.037 .003 4 .036 .039 .041
5										
0										
5										
10										
15				.036 .009 4 .040 .047 .049						.038 .009 4 .040 .047 .049
20				.048 .022 8 .061 .083 .078						.048 .022 8 .061 .083 .078
25				.068 .034 16 .077 .098 .176						.086 .034 16 .076 .098 .175
30				.138 .083 15 .121 .189 .203						.135 .053 15 .121 .189 .203
35				.211 .108 32 .167 .265 .474						.211 .108 32 .167 .265 .474
40										
45S										

LONGITUDE

TABLE VII. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55				.303 .077 3 .298 .362 .406				.296 .029 6 .302 .324 .333		.298 .050 9 .295 .331 .399
50				.217 .060 13 .232 .281 .298				.245 .078 27 .269 .319 .340		.236 .073 40 .229 .306 .339
45			.259 .186 6 .168 .509 .828	.263 .138 15 .233 .427 .917	.327 .079 9 .366 .379 .392	.208 .070 9 .159 .260 .328	.286 .126 26 .263 .444 .623			.273 .129 67 .262 .412 .526
40			.238 .141 30 .249 .372 .844	.197 .096 14 .181 .341 .362	.256 1	.147 .074 7 .132 .184 .296				.215 .126 52 .126 .341 .542
35			.188 .126 4 .186 .302 .369			.120 .016 2 .123 .133 .136				.159 .102 7 .123 .227 .358
30										
25										
20										
15										
10										
5										
0										
5										
10										
15										
20										
25										
30										
35				.340 .182 54 .328 .503 .720						.340 .182 54 .328 .503 .720
40										
45S										

LONGITUDE

TABLE VIII. - GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60											60
55								.071 1		.071 1	55
50				.037 .002 2 .037 .036 .039	.067 .025 10 .075 .060 .099		.081 .010 18 .082 .069 .099	.078 .020 47 .076 .091 .115		.076 .020 77 .077 .090 .110	50
45	.082 .013 20 .080 .093 .106			.046 .008 6 .046 .053 .056	.060 .009 7 .065 .067 .068	.054 .002 3 .055 .056 .056	.064 .005 10 .064 .069 .072	.083 .003 3 .081 .085 .087		.069 .016 49 .067 .085 .101	45
40	.099 .038 26 .092 .118 .193		.049 .011 5 .051 .058 .063	.056 .005 2 .058 .061 .062	.073 .017 4 .076 .089 .089	.071 .035 7 .081 .107 .110	.067 .015 11 .061 .077 .101			.081 .035 55 .076 .111 .127	40
35	.067 .015 54 .069 .083 .096		.042 .009 5 .043 .051 .051		.064 .036 8 .048 .086 .137	.066 .016 6 .063 .075 .096	.079 .012 5 .082 .089 .096			.066 .020 30 .060 .083 .106	35
30	.067 .028 34 .058 .082 .160	.062 .013 26 .065 .072 .090	.060 1			.058 .002 2 .058 .059 .059	.087 .013 4 .094 .096 .096			.066 .023 67 .059 .081 .136	30
25	.072 .028 5 .052 .101 .114	.024 .013 14 .022 .030 .055	.047 .002 3 .047 .049 .050		.031 1	.104 1				.040 .028 24 .026 .056 .110	25
20		.034 .010 20 .034 .040 .052	.039 .009 4 .039 .046 .060		.035 .012 10 .041 .047 .049	.063 1				.036 .011 35 .037 .047 .056	20
15		.022 .010 18 .024 .034 .036	.022 .008 3 .017 .026 .032		.028 1	.060 1				.024 .012 23 .025 .034 .051	15
10		.029 .007 17 .031 .035 .040	.013 1			.044 1				.029 .008 19 .031 .035 .043	10
5		.026 .007 23 .025 .032 .041				.041 1				.027 .008 24 .025 .034 .042	5
0		.032 .009 10 .036 .040 .041	.019 .004 6 .018 .021 .026							.027 .010 16 .024 .040 .041	0
5			.018 .003 6 .017 .022 .023							.018 .003 6 .017 .022 .023	5
10			.025 .006 2 .025 .026 .030	.018 1						.022 .005 3 .019 .026 .030	10
15		.072 .014 5 .073 .085 .093	.018 1	.027 .003 5 .025 .030 .031						.047 .025 11 .031 .076 .091	15
20		.047 .008 6 .043 .054 .061	.040 1	.019 1			.048 .014 2 .048 .057 .060			.043 .012 10 .042 .057 .062	20
25			.063 .024 11 .049 .067 .104	.025 .001 4 .025 .026 .027						.053 .027 15 .042 .081 .103	25
30			.065 .028 15 .056 .092 .112							.065 .028 15 .056 .092 .112	30
35			.054 .017 7 .056 .067 .079	.080 .010 8 .065 .059 .091						.052 .014 15 .057 .064 .077	35
40											40
45S											45S

LONGITUDE

TABLE VIII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60											60
55					.134 .113 .050 .202 9 .204		.097 .090 .034 .108 14 .177	.096 .084 .040 .102 14 .204		.106 .088 .044 .135 37 .211	55
50				.044 1	.196 .166 .033 .232 10 .286		.076 .076 .002 .078 3 .079	.084 .074 .043 .092 54 .265		.100 .078 .057 .168 66 .260	50
45	.075 .072 .018 .089 17 .116					.048 .048 .005 .052 3 .055		.083 .085 .018 .101 10 .107		.075 .066 .020 .087 30 .114	45
40	.069 .064 .017 .084 75 .116		.053 .056 .007 .059 3 .060	.045 .046 .006 .061 6 .052	.072 .074 .028 .081 7 .117	.063 .066 .021 .080 14 .095	.085 .091 .013 .096 7 .098	.085 .082 .010 .093 3 .097		.068 .065 .019 .089 115 .118	40
35	.064 .062 .017 .079 32 .100		.056 .053 .016 .065 13 .090		.087 .081 .036 .105 32 .143	.057 .057 .010 .067 4 .070				.064 .060 .026 .084 81 .131	35
30	.066 .069 .013 .075 21 .091	.047 .046 .010 .064 80 .073	.052 .052 .004 .055 3 .057		.085 .072 .026 .092 8 .098	.066 1				.054 .049 .016 .070 84 .092	30
25	.047 .047 .008 .053 15 .065	.034 .034 .009 .041 28 .050	.043 .041 .005 .052 8 .055	.042 .042 .002 .044 4 .044	.041 .041 .004 .044 2 .045					.040 .039 .010 .050 55 .061	25
20		.027 .026 .006 .031 31 .038	.041 .042 .003 .043 5 .046	.038 .037 .009 .044 12 .057	.032 .035 .012 .037 14 .048					.031 .020 .010 .037 62 .052	20
15		.026 .024 .008 .032 35 .045	.020 .018 .008 .025 7 .035	.017 .016 .009 .018 13 .038	.026 .026 .007 .034 18 .035	.067 1				.024 .022 .010 .032 74 .045	15
10		.030 .027 .006 .039 27 .043		.022 1	.019 .019 .003 .019 8 .023	.041 .041 .010 .047 2 .050	.042 1			.028 .026 .008 .039 39 .046	10
5		.025 .023 .007 .036 21 .038		.014 .013 .006 .019 6 .024						.023 .021 .009 .035 27 .037	5
0		.041 .041 .003 .044 7 .044	.031 .029 .008 .034 8 .047				.066 1			.036 .031 .010 .044 16 .061	0
5		.034 .034 .005 .039 10 .041	.024 .023 .006 .028 22 .037				.062 .063 .002 .064 4 .064			.031 .027 .013 .039 36 .064	5
10		.033 .036 .008 .042 11 .046	.023 .020 .006 .029 25 .034	.036 1			.071 .070 .002 .073 4 .074			.031 .027 .015 .039 41 .072	10
15			.027 .027 .005 .031 16 .036	.032 1			.066 .065 .001 .067 5 .066			.036 .027 .017 .065 22 .067	15
20		.042 1	.028 .028 .004 .031 19 .038	.066 1			.067 .065 .005 .080 7 .066			.037 .029 .014 .055 28 .063	20
25			.042 .037 .022 .066 40 .090	.027 1			.061 1			.042 .037 .022 .064 42 .090	25
30			.069 .059 .022 .060 35 .106							.069 .059 .022 .060 35 .106	30
35			.099 .070 .066 .108 8 .294	.085 .083 .031 .102 8 .144						.092 .080 .066 .108 16 .272	35
40											40
45S											45S

LONGITUDE

TABLE VIII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(c) Flight level 330

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

AUGUST
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60				.086 .024 6 .077 .117 .118	.115 1	.153 .090 5 .086 .262 .267	.369 .040 5 .354 .404 .434			.191 .130 17 .117 .346 .421
55				.072 .018 11 .070 .096 .099	.130 .023 6 .132 .143 .163	.142 .072 11 .113 .198 .296	.211 .129 18 .239 .343 .414	.112 .093 57 .080 .126 .369		.129 .099 103 .084 .230 .398
50				.084 .020 18 .086 .094 .135		.070 .010 4 .071 .079 .082	.142 .084 37 .109 .242 .333	.093 .036 48 .085 .117 .142		.107 .061 107 .091 .121 .324
45	.094 .031 32 .082 .132 .165			.083 .035 12 .072 .116 .199		.088 .021 13 .087 .092 .101	.096 .027 70 .094 .119 .167	.076 .010 6 .072 .085 .095		.091 .029 133 .086 .116 .172
40	.100 .053 77 .083 .143 .262		.089 .038 5 .096 .127 .134	.063 .037 20 .048 .097 .146	.094 1	.060 .024 18 .056 .086 .107	.078 .021 14 .079 .092 .117	.056 .013 2 .056 .064 .068		.086 .047 137 .078 .117 .231
35	.062 .015 75 .051 .078 .090		.049 .018 26 .046 .068 .090		.070 .040 44 .061 .086 .217	.091 .034 8 .097 .111 .137				.063 .028 153 .059 .081 .134
30	.068 .018 22 .067 .095 .097	.053 .012 38 .048 .065 .079	.040 .018 32 .040 .052 .079		.046 .015 85 .042 .057 .083	.051 .020 21 .043 .076 .094	.060 1			.049 .018 199 .046 .066 .090
25	.042 .004 20 .043 .046 .047	.043 .013 68 .041 .058 .070	.043 .015 40 .044 .057 .070	.078 .024 12 .063 .101 .117	.043 .018 48 .042 .063 .078	.070 .021 14 .073 .089 .103	.076 .014 5 .069 .067 .100			.048 .019 207 .044 .066 .101
20		.032 .008 77 .030 .040 .049	.031 .010 10 .030 .038 .050	.032 .011 22 .035 .041 .047	.026 .013 12 .019 .038 .054	.068 .007 4 .060 .084 .086	.054 .013 5 .056 .066 .069			.033 .012 130 .028 .043 .063
15		.030 .008 39 .028 .038 .045	.024 .007 15 .025 .029 .034	.031 .002 6 .031 .033 .035	.025 .002 3 .023 .026 .028	.068 .013 13 .071 .081 .083	.026 .015 5 .024 .043 .044			.034 .017 81 .029 .045 .081
10		.026 .005 15 .026 .030 .039	.018 .001 4 .018 .019 .019		.030 .013 5 .024 .045 .046		.046 .006 8 .045 .047 .056			.031 .012 32 .023 .045 .052
5		.032 .014 17 .027 .050 .068	.017 .003 5 .017 .020 .023			.042 .009 7 .038 .045 .060	.039 .007 17 .039 .047 .050			.035 .012 46 .030 .048 .059
0		.027 .006 11 .026 .033 .036	.018 .005 19 .019 .022 .027				.053 .012 17 .052 .062 .078			.033 .018 47 .028 .053 .071
5		.041 .006 8 .043 .044 .045	.019 .006 23 .019 .022 .033				.048 .005 7 .046 .052 .056			.028 .014 36 .021 .044 .054
10		.040 .005 8 .038 .043 .049	.023 .007 27 .022 .031 .033	.028 .003 5 .027 .031 .033			.046 .004 8 .048 .049 .050			.029 .010 43 .030 .039 .050
15		.038 .004 8 .039 .041 .044	.027 .008 34 .028 .038 .041	.026 .005 9 .027 .029 .032	.042 .010 14 .044 .051 .053		.058 .002 8 .058 .059 .062			.034 .013 73 .031 .048 .059
20		.055 .014 7 .050 .073 .073	.036 .014 52 .034 .043 .071	.036 .011 17 .032 .048 .061			.055 .000 2 .055 .055 .055			.038 .014 78 .034 .050 .073
25			.073 .052 32 .064 .082 .227	.060 .040 51 .044 .096 .187						.065 .045 83 .053 .094 .223
30			.077 .024 22 .068 .112 .126	.101 .067 68 .082 .154 .278						.095 .052 87 .075 .132 .266
35			.094 .076 38 .079 .112 .333	.138 .071 21 .121 .218 .288						.109 .077 59 .088 .171 .324
40				.183 .101 8 .130 .305 .375						.183 .101 8 .130 .305 .375
45S				.372 1						.372 1

LONGITUDE

TABLE VIII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.060 .010 4 .045 .067 .066	.061 .012 4 .062 .073 .076	.207 .066 10 .210 .276 .313	.212 .092 9 .229 .263 .376		.164 .097 27 .137 .262 .358
60					.296 .074 11 .314 .335 .384	.275 .118 67 .298 .392 .480		.132 .095 24 .097 .225 .337		.243 .123 102 .266 .369 .463
55				.119 1		.221 .114 52 .212 .340 .437	.229 .136 28 .202 .381 .427	.161 .094 65 .131 .256 .400		.195 .115 146 .137 .331 .425
50				.113 .066 48 .085 .171 .303	.047 .009 10 .050 .054 .069	.161 .115 50 .111 .277 .400	.111 .082 114 .079 .171 .373	.119 .075 132 .088 .185 .358		.119 .084 354 .080 .191 .375
45	.132 .067 32 .105 .201 .301		.178 .049 3 .149 .216 .243	.096 .065 81 .063 .145 .284	.072 .044 39 .055 .102 .192	.101 .070 77 .077 .146 .315	.147 .102 55 .091 .296 .365	.118 .045 8 .100 .127 .219		.109 .076 295 .086 .164 .356
40	.143 .078 35 .124 .226 .314		.060 .017 36 .061 .072 .096	.060 .041 34 .068 .125 .183	.077 .048 245 .068 .106 .189	.075 .045 150 .068 .099 .217	.089 .010 10 .090 .095 .108	.118 .042 3 .101 .152 .173		.080 .049 513 .070 .109 .228
35	.082 .023 137 .057 .077 .122		.065 .019 12 .069 .077 .100	.067 .027 8 .060 .076 .118	.064 .037 113 .058 .091 .177	.058 .034 8 .062 .101 .102				.063 .029 274 .042 .067 .130
30	.050 .016 64 .051 .068 .084	.039 .018 35 .034 .069 .076			.057 .032 185 .054 .060 .144	.067 .010 10 .066 .075 .083				.054 .028 294 .047 .073 .121
25	.042 .007 37 .042 .049 .063	.038 .008 15 .034 .045 .063	.030 1	.058 .010 7 .067 .066 .075	.046 .021 182 .042 .066 .093	.061 .011 18 .063 .070 .081				.046 .018 240 .040 .064 .093
20		.038 .009 38 .036 .047 .061	.026 .009 8 .023 .029 .044	.044 .017 60 .038 .064 .079	.052 .034 52 .048 .068 .187	.072 .016 15 .078 .081 .101				.047 .024 171 .039 .065 .102
15		.031 .009 18 .031 .037 .049	.026 .006 27 .025 .032 .036	.029 .010 10 .026 .042 .044	.030 .012 27 .027 .036 .062	.060 .006 11 .062 .066 .067				.032 .014 93 .028 .044 .067
10		.025 .015 32 .021 .041 .062	.016 .003 4 .017 .018 .019	.026 .004 5 .024 .030 .030	.025 .006 21 .023 .032 .042	.062 .012 17 .061 .070 .088	.050 .016 9 .042 .085 .073			.034 .020 88 .024 .060 .076
5		.024 .012 23 .019 .040 .045	.015 .002 7 .015 .017 .018	.027 .004 9 .025 .031 .031	.027 .014 28 .021 .042 .056	.043 .001 3 .043 .044 .045	.052 .010 15 .052 .060 .072			.030 .016 83 .023 .047 .063
0		.028 .011 21 .028 .040 .046	.020 .007 28 .020 .027 .032	.021 .010 39 .019 .034 .041	.029 .018 6 .019 .052 .056		.056 .009 18 .055 .065 .075			.026 .016 112 .019 .046 .066
5		.028 .004 8 .028 .030 .033	.022 .007 39 .020 .027 .037	.021 .008 34 .020 .026 .040			.063 .011 21 .059 .074 .083			.030 .018 102 .022 .052 .075
10		.026 .000 4 .026 .027 .027	.024 .008 35 .022 .030 .040	.026 .008 36 .026 .032 .045			.077 .015 20 .076 .093 .101			.036 .023 95 .026 .068 .095
15		.028 .004 13 .026 .034 .036	.028 .007 38 .026 .034 .038	.025 .007 25 .027 .032 .036	.032 .004 12 .033 .034 .039		.072 .017 18 .074 .084 .101			.035 .019 106 .029 .042 .085
20		.033 .005 12 .033 .039 .041	.029 .010 35 .026 .042 .047	.037 .011 37 .034 .050 .058			.071 .016 6 .065 .084 .101			.036 .015 90 .025 .048 .058
25			.060 .061 34 .048 .091 .191	.059 .033 46 .049 .086 .178			.090 .042 3 .066 .123 .147			.061 .042 83 .049 .088 .177
30			.071 .026 42 .064 .101 .130	.090 .046 64 .078 .141 .198			.302 .038 7 .306 .384 .398			.099 .076 113 .068 .142 .306
35			.128 .056 44 .123 .190 .266	.173 .093 32 .159 .227 .305			.157 .046 3 .147 .195 .215			.147 .076 79 .139 .217 .282
40				.179 .058 11 .158 .233 .301						.179 .058 11 .158 .233 .301
45S										

LONGITUDE

TABLE VIII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N							.437 .476 11 .486			.437 .476 11 .486	70N
65				.118 .106 .060 .187 13 .230	.194 .134 .137 .376 77 .487	.307 .295 .147 .444 7 .506	.412 .477 .122 .511 11 .519	.117 .110 .024 .135 6 .166		.208 .130 .147 .392 116 .514	65
60				.244 .219 .121 .387 34 .451	.254 .264 .113 .366 46 .460	.242 .210 .075 .320 17 .366	.296 .309 .115 .405 13 .470	.159 .130 .073 .219 8 .294		.247 .244 .112 .374 117 .467	60
55				.258 .255 .119 .392 58 .433	.206 .187 .081 .283 12 .367	.197 .182 .121 .290 35 .511	.270 .225 .170 .467 36 .529	.220 .159 .136 .411 39 .456		.237 .170 .136 .402 180 .503	55
50				.118 .071 .108 .214 82 .401	.192 .200 .134 .331 118 .470	.143 .123 .108 .285 34 .333	.194 .130 .121 .365 88 .421	.130 .126 .048 .174 78 .244		.181 .070 .116 .290 398 .448	50
45	.166 .151 .060 .244 24 .280		.247 .247 .007 .252 2 .254	.130 .087 .109 .250 182 .408	.127 .089 .104 .250 67 .357	.109 .094 .069 .170 47 .316	.097 .091 .050 .121 69 .203	.134 .121 .050 .178 31 .236		.128 .056 .092 .209 422 .379	45
40	.094 .073 .061 .146 22 .241		.061 .058 .026 .092 53 .128	.081 .056 .078 .107 110 .420	.087 .067 .064 .113 84 .313	.069 .062 .035 .098 240 .163	.096 .092 .016 .107 14 .135			.074 .061 .052 .098 503 .252	40
35	.055 .055 .011 .061 15 .078		.049 .047 .015 .061 53 .094	.056 .053 .022 .066 28 .116	.066 .060 .034 .090 78 .142	.061 .067 .026 .101 49 .129	.099 .101 .011 .108 5 .114			.064 .058 .029 .090 223 .127	35
30	.072 .075 .014 .085 17 .094	.054 .053 .019 .078 18 .085	.034 .040 .014 .046 14 .051		.065 .049 .027 .079 203 .117	.067 .066 .002 .066 3 .066	.112 .125 .025 .131 3 .134			.056 .050 .027 .082 256 .124	30
25	.042 1	.067 .065 .013 .082 14 .083	.061 .061 .009 .064 11 .080		.047 .042 .018 .066 179 .083	.065 .062 .010 .074 3 .078	.092 .092 .026 .118 6 .122			.050 .048 .020 .066 214 .089	25
20		.038 .037 .013 .057 18 .062	.044 .043 .016 .060 19 .077	.044 .041 .011 .053 9 .062	.037 .035 .014 .052 38 .064	.073 .077 .010 .081 7 .083	.077 .072 .012 .065 4 .096			.043 .039 .018 .063 95 .081	20
15		.026 .027 .011 .038 34 .043	.025 .026 .007 .030 18 .035		.027 .024 .014 .037 33 .063	.066 .069 .012 .074 7 .083	.065 .064 .005 .068 4 .072			.031 .025 .017 .043 90 .072	15
10		.028 .028 .004 .031 16 .036	.021 .021 .005 .027 15 .028	.021 .014 .011 .037 11 .041	.025 .021 .011 .036 43 .063	.067 .070 .014 .078 15 .089	.060 .059 .005 .065 4 .068			.032 .021 .019 .053 104 .079	10
5		.025 .026 .007 .030 12 .038		.021 .016 .012 .031 38 .050	.026 .024 .012 .036 38 .052		.067 1			.024 .023 .012 .033 89 .055	5
0		.039 1		.022 .022 .009 .029 39 .044	.029 .032 .007 .034 17 .041		.064 .069 .011 .075 8 .078			.029 .025 .016 .041 65 .075	0
5				.026 .025 .011 .035 51 .054	.056 .060 .010 .062 7 .071		.074 .082 .016 .085 21 .098			.043 .032 .024 .076 79 .086	5
10			.017 .017 .003 .019 10 .021	.029 .027 .009 .035 42 .051	.066 1		.070 .066 .014 .088 21 .096			.039 .028 .022 .061 74 .089	10
15			.027 .028 .006 .033 4 .034	.034 .029 .014 .047 34 .069			.067 .063 .012 .079 16 .096			.043 .032 .020 .063 54 .089	15
20			.020 .016 .007 .022 6 .034	.039 .039 .011 .049 17 .056			.059 .058 .010 .068 11 .074			.042 .039 .017 .056 34 .071	20
25			.039 .036 .012 .052 16 .061	.106 1			.218 .218 .125 .302 2 .337			.061 .037 .070 .067 19 .257	25
30			.132 .062 .129 .337 33 .433	.124 .110 .033 .148 10 .198			.483 .484 .023 .502 4 .512			.160 .100 .147 .354 47 .490	30
35			.172 .138 .111 .310 70 .473	.178 .159 .077 .262 18 .313			.223 1			.173 .153 .105 .294 87 .456	35
40											40
45S											45S

LONGITUDE

TABLE VIII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.529 .016 6 .536 .541 .546	.513 .047 2 .513 .545 .566			.526 .028 6 .536 .546 .559
65					.270 .118 96 .282 .393 .455	.380 .106 38 .377 .489 .521	.462 .093 19 .483 .540 .569			.321 .132 153 .340 .462 .539
60				.281 .115 84 .306 .397 .476	.284 .128 76 .323 .432 .481	.384 .105 41 .391 .501 .563	.432 .033 19 .433 .467 .490	.297 .120 27 .360 .408 .433		.323 .125 217 .360 .414 .516
55				.304 .097 89 .302 .394 .483	.328 .133 19 .273 .466 .500	.373 .112 26 .400 .466 .526	.340 .120 28 .406 .447 .470	.298 .070 38 .300 .371 .431		.322 .106 170 .316 .440 .507
50				.194 .140 148 .144 .382 .498	.172 .118 111 .142 .267 .456	.234 .113 28 .184 .342 .485	.300 .092 20 .282 .398 .416	.137 .055 38 .129 .190 .272		.190 .127 342 .133 .351 .488
45	.213 .088 8 .171 .329 .348		.102 .004 2 .102 .105 .108	.125 .110 126 .078 .210 .444	.207 .146 61 .156 .421 .515	.106 .063 46 .094 .137 .305	.134 .080 45 .106 .212 .370	.171 .063 27 .157 .215 .340		.145 .111 314 .091 .239 .471
40	.060 .009 13 .060 .067 .078		.113 .051 13 .093 .140 .244	.080 .090 107 .044 .110 .330	.106 .036 27 .096 .181 .184	.084 .038 236 .077 .123 .180	.107 .005 10 .108 .111 .114			.085 .057 406 .083 .121 .278
35	.037 .003 2 .037 .039 .040		.065 .032 38 .066 .097 .121	.056 .019 78 .056 .070 .105	.081 .043 19 .078 .115 .173	.078 .027 47 .078 .093 .139				.066 .029 182 .056 .093 .135
30			.057 .024 62 .055 .073 .112	.061 .007 14 .061 .066 .075	.082 .027 28 .086 .106 .135	.127 .013 7 .127 .135 .147				.068 .030 111 .063 .096 .133
25	.071 .009 7 .088 .093 .096	.078 1	.043 .019 30 .037 .068 .081		.067 .025 26 .078 .092 .101	.065 .024 6 .072 .118 .119				.059 .020 70 .044 .083 .112
20		.053 .008 9 .055 .060 .064	.060 .024 14 .065 .087 .096		.029 .015 24 .027 .046 .055					.043 .023 47 .048 .064 .091
15			.027 .014 18 .028 .036 .067		.029 .015 28 .030 .046 .060					.026 .015 44 .023 .039 .061
10		.017 .008 18 .019 .026 .029	.018 .006 15 .015 .025 .027	.030 .009 4 .028 .037 .044	.030 .017 31 .029 .047 .070					.024 .014 66 .016 .034 .057
5		.020 .004 9 .022 .023 .024		.035 .005 3 .035 .039 .041	.013 .010 9 .010 .025 .030	.047 .011 3 .048 .056 .060	.079 .011 4 .064 .086 .087			.030 .024 28 .017 .056 .086
0		.023 1	.024 1		.038 .016 24 .035 .052 .062		.078 .003 4 .078 .081 .083			.040 .021 30 .036 .061 .080
5					.032 .015 24 .029 .052 .061					.032 .015 24 .029 .052 .061
10				.027 .010 23 .023 .038 .060	.031 .005 4 .028 .035 .039					.026 .009 27 .024 .039 .049
15			.016 .002 8 .017 .018 .020	.035 .013 14 .035 .041 .062						.030 .014 19 .026 .041 .061
20			.016 .002 8 .017 .020 .020	.031 .009 5 .037 .039 .040						.023 .009 13 .019 .037 .040
25			.022 .002 7 .022 .023 .026							.022 .002 7 .022 .023 .026
30			.050 .021 12 .064 .067 .070							.050 .021 12 .045 .067 .070
35			.176 .034 3 .200 .203 .204	.285 .140 43 .276 .424 .547						.259 .137 46 .242 .422 .546
40										
45S										

LONGITUDE

TABLE VIII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65						.489 1				.489 1	65
60				.366 .062 7 .398 .406 .452	.396 .035 8 .404 .423 .438	.370 .082 19 .402 .456 .493	.451 .100 30 .444 .548 .599	.448 .079 15 .442 .536 .578		.418 .093 77 .422 .519 .561	60
55				.381 .100 39 .403 .470 .510		.317 .113 41 .299 .451 .504	.367 .125 47 .407 .461 .536	.363 .114 95 .375 .493 .528		.358 .116 222 .376 .478 .530	55
50				.232 .125 65 .208 .377 .452	.157 .074 46 .174 .226 .294	.300 .124 77 .301 .431 .484	.303 .130 54 .281 .464 .492	.235 .167 14 .146 .483 .498		.254 .133 256 .176 .423 .489	50
45	.173 .022 10 .177 .192 .199		.142 .087 8 .106 .256 .296	.142 .076 56 .113 .221 .316	.194 .144 125 .155 .353 .569	.223 .112 102 .212 .370 .445	.139 .056 47 .119 .169 .268	.361 .071 12 .347 .450 .465		.191 .120 360 .105 .314 .474	45
40	.092 .033 23 .081 .122 .178		.088 .046 29 .097 .108 .204	.071 .014 12 .069 .085 .101	.157 .094 98 .133 .261 .401	.086 .062 78 .066 .120 .278	.138 .052 13 .118 .159 .272			.116 .079 253 .091 .171 .369	40
35	.085 .006 12 .085 .091 .100		.059 .025 12 .053 .096 .103		.072 .025 22 .068 .096 .121	.134 .057 16 .117 .204 .243				.088 .045 62 .072 .114 .217	35
30	.080 .018 11 .084 .100 .107				.062 .020 22 .064 .081 .097					.068 .021 33 .067 .089 .106	30
25		.114 .018 2 .114 .126 .131	.011 .019 9 .004 .011 .055		.050 .017 21 .044 .065 .082					.043 .030 32 .039 .065 .110	25
20		.075 .012 8 .077 .065 .069	.042 .021 13 .032 .066 .086		.036 .008 7 .036 .045 .047					.050 .023 28 .040 .080 .089	20
15			.020 .006 26 .020 .026 .031		.018 .008 8 .019 .023 .031					.020 .006 34 .019 .026 .031	15
10		.020 .003 6 .019 .021 .025	.020 .004 27 .020 .023 .029		.034 1					.020 .005 34 .020 .025 .031	10
5		.027 .004 2 .027 .029 .030	.022 .010 8 .021 .028 .039							.023 .009 10 .021 .029 .039	5
0											0
5											5
10				.026 .000 5 .026 .026 .026						.026 .000 5 .026 .026 .026	10
15				.032 .006 7 .030 .038 .041						.032 .006 7 .030 .038 .041	15
20				.037 .010 12 .035 .045 .058						.037 .010 12 .035 .045 .058	20
25				.054 .019 24 .047 .066 .105						.054 .019 24 .047 .066 .105	25
30				.144 .080 25 .121 .252 .317						.144 .080 25 .121 .252 .317	30
35				.270 .142 15 .267 .421 .546						.270 .142 15 .267 .421 .546	35
40											40
45S											45S

LONGITUDE

TABLE VIII. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60											60
55				.170 .003 2 .170 .172 .175				.277 .070 8 .240 .368 .403		.256 .076 10 .225 .337 .402	55
50				.178 .048 12 .167 .210 .219		.245 .149 5 .216 .331 .507	.190 .018 4 .191 .206 .212			.195 .087 21 .191 .215 .408	50
45			.110 .083 10 .096 .144 .293	.138 .089 23 .133 .202 .273		.142 .087 24 .118 .268 .321	.297 .056 9 .285 .357 .396			.157 .095 66 .088 .270 .359	45
40			.076 .043 43 .066 .118 .168	.084 .019 15 .078 .093 .133		.118 .029 11 .114 .148 .167	.313 1			.088 .048 70 .062 .126 .222	40
35			.071 .009 6 .070 .082 .086		.156 .036 7 .144 .200 .217	.111 .029 4 .101 .135 .184				.115 .046 17 .111 .151 .213	35
30					.104 .019 8 .096 .124 .142					.104 .019 8 .096 .124 .142	30
25			.042 .009 6 .039 .054 .056							.042 .009 6 .039 .054 .056	25
20			.048 .014 7 .044 .061 .065							.048 .014 7 .044 .061 .065	20
15			.032 .014 18 .032 .044 .056							.032 .014 18 .032 .044 .056	15
10			.027 .015 19 .026 .037 .055							.027 .015 19 .026 .037 .055	10
5	.018 .004 4 .018 .022 .022		.021 .007 8 .021 .027 .031							.020 .006 12 .018 .027 .031	5
0											0
5											5
10											10
15											15
20											20
25											25
30											30
35				.209 .025 7 .202 .242 .248						.208 .026 7 .202 .242 .248	35
40											40
45S											45S

LONGITUDE

TABLE IX. - GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(a) Flight level 290

CONE:

MEAN	ST. DEV.	N
50%	84%	96%

SEPTEMBER
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55								.074 .074 .084 .087 2		.074 .074 .084 .087 2
50								.080 .073 .089 .189 25		.080 .073 .089 .189 25
45	.065 .081 .107 .127 20						.040 .039 .043 .045 3	.088 .087 .100 .102 6		.081 .080 .102 .125 29
40	.084 .080 .103 .152 21				.038 .038 .045 .049 2	.046 .039 .068 .081 13	.050 .046 .062 .091 20			.062 .055 .085 .141 56
35	.053 .050 .065 .069 7		.034 .024 .050 .070 6		.030 .031 .037 .046 13	.023 .020 .033 .038 3				.036 .032 .049 .071 28
30	.055 .053 .065 .068 3	.065 .064 .071 .075 13			.043 .042 .054 .056 9					.056 .056 .069 .074 25
25	.073 1		.070 .070 .073 .075 2		.027 .031 .040 .042 6					.041 .039 .070 .075 9
20		.042 .040 .046 .053 8	.048 .049 .070 .074 6		.017 .018 .024 .041 7					.035 .039 .052 .072 21
15		.031 .030 .032 .033 3				.029 .030 .031 .032 3				.030 .030 .032 .033 6
10		.029 .029 .031 .036 6				.041 1				.030 .030 .035 .040 7
5		.028 1								.028 1
0			.026 .027 .029 .030 3							.026 .027 .029 .030 3
5			.021 .021 .022 .024 7							.021 .021 .022 .024 7
10			.022 .022 .022 .022 6							.022 .022 .022 .022 6
15			.018 .019 .019 .019 2	.012 .012 .020 .024 2						.015 .019 .009 .022 .024 4
20		.078 1		.013 .012 .006 .013 .027 6						.020 .013 .020 .023 .069 10
25			.083 .082 .007 .086 .094 6	.037 .036 .013 .050 .052 4			.077 1			.066 .077 .024 .084 .090 11
30			.092 .092 .011 .099 .103 2	.082 .077 .021 .103 .119 11						.084 .080 .020 .103 .118 13
35			.082 .066 .037 .091 .164 6	.084 .048 .092 .149 .229 4						.083 .064 .061 .113 .226 12
40			.121 1							.121 1
45S										

LONGITUDE

TABLE IX. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60							.083 .039 15 .068 .102 .179	.088 .049 18 .080 .101 .215		.086 .045 31 .072 .103 .202
55							.167 .101 26 .158 .286 .365	.070 .032 46 .061 .099 .147		.112 .067 72 .080 .194 .356
50							.068 .023 38 .060 .094 .104	.069 .029 49 .056 .094 .183		.089 .026 85 .056 .085 .136
45					.103 .052 6 .089 .145 .196	.119 .021 2 .118 .192 .136	.065 .020 39 .061 .085 .107	.079 .021 13 .088 .098 .106		.073 .029 60 .062 .097 .137
40	.111 .015 2 .111 .121 .129		.032 .002 3 .033 .034 .034	.081 .039 11 .071 .122 .166	.059 .020 7 .053 .088 .069	.061 .027 41 .060 .077 .104	.087 .019 11 .058 .087 .104			.059 .030 75 .052 .090 .134
35	.078 .016 12 .073 .095 .114		.047 .020 20 .043 .081 .089	.116 .016 8 .116 .128 .133	.034 .018 12 .030 .055 .062	.043 .018 9 .042 .063 .069				.053 .027 85 .052 .072 .118
30	.056 .012 13 .054 .066 .086	.021 1								.056 .015 14 .054 .066 .086
25	.045 .005 2 .045 .048 .050				.020 .001 2 .020 .021 .021					.032 .013 4 .030 .045 .049
20			.054 .014 4 .052 .065 .075		.014 .006 3 .014 .016 .020					.037 .023 7 .036 .055 .073
15			.019 1		.009 .006 8 .007 .014 .018	.044 1				.014 .011 10 .007 .019 .040
10			.013 1	.010 .015 8 .006 .010 .044	.016 .013 5 .008 .028 .037		.038 1			.014 .015 15 .007 .032 .046
5		.030 1		.009 .003 16 .010 .012 .013						.010 .005 17 .010 .012 .025
0		0.000 1		.011 .002 14 .012 .013 .018						.011 .004 15 .012 .013 .015
5				.009 .001 9 .010 .010 .011						.009 .001 9 .010 .010 .011
10										
15			.019 1	.008 .011 9 0.000 .018 .022						.011 .011 4 .010 .021 .023
20			.023 .001 4 .023 .024 .024	.056 .008 2 .056 .061 .064			.063 1			.037 .016 7 .024 .053 .063
25			.030 .011 5 .023 .044 .046	.067 .010 5 .063 .072 .064						.049 .021 10 .040 .064 .082
30			.061 .014 5 .059 .075 .082	.086 .019 8 .083 .099 .124						.077 .021 13 .076 .087 .122
35				.088 .019 8 .086 .105 .106			.046 1			.082 .023 7 .089 .105 .106
40										
45S										

LONGITUDE

TABLE IX. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65						.389 1	.179 .155 .067 .199 17 .351	.240 .222 .029 .272 5 .279		.201 .174 .073 .273 23 .361	65
60				.107 .092 .034 .124 6 .173	.120 1	.198 .210 .132 .371 14 .383	.160 .173 .032 .187 6 .191	.112 .063 .098 .244 15 .311		.147 .076 .106 .263 42 .379	60
55				.123 .096 .086 .200 8 .227	.096 .063 .047 .147 14 .178	.084 .073 .036 .114 11 .157	.107 .062 .071 .194 20 .205	.100 .069 .066 .211 55 .248		.101 .045 .063 .188 108 .246	55
50				.097 .098 .023 .122 25 .133	.221 .226 .015 .232 10 .237	.076 .084 .017 .090 7 .093	.086 .053 .070 .180 129 .269	.080 .086 .040 .109 94 .162		.090 .064 .061 .152 265 .236	50
45			.086 .092 .004 .056 3 .061	.100 .065 .059 .183 24 .208	.064 .067 .020 .079 9 .088	.056 .060 .034 .078 25 .133	.086 .057 .069 .125 93 .324	.077 .054 .045 .145 24 .163		.081 .055 .060 .126 178 .268	45
40	.092 .083 .018 .112 11 .118		.053 .061 .016 .069 21 .087	.150 .146 .095 .194 18 .272	.042 .037 .012 .050 7 .066	.053 .045 .030 .079 34 .131	.061 .055 .021 .091 16 .102			.074 .056 .048 .117 107 .199	40
35	.071 .068 .021 .084 13 .114		.046 .047 .016 .061 19 .069		.033 .032 .018 .042 34 .073	.068 .049 .039 .107 11 .134	.079 .062 .008 .064 6 .084			.050 .043 .027 .060 83 .113	35
30	.053 .047 .012 .066 9 .078	.062 .066 .011 .072 15 .079	.043 .039 .018 .063 16 .073		.043 .045 .013 .056 24 .082	.050 .047 .016 .069 7 .075	.092 .088 .006 .096 3 .100			.051 .038 .018 .068 74 .088	30
25		.038 .041 .007 .042 8 .049	.055 .063 .017 .066 23 .076		.023 .025 .012 .034 21 .043	.050 .055 .015 .059 8 .066	.058 .058 .009 .067 7 .070			.042 .038 .020 .065 68 .076	25
20		.032 .033 .003 .036 7 .036	.041 .040 .020 .053 6 .075		.027 .028 .005 .031 4 .033	.066 .066 .005 .070 6 .071	.051 .051 .008 .056 2 .058			.043 .036 .018 .066 25 .075	20
15		.032 .034 .005 .037 9 .041	.026 .029 .009 .035 6 .036			.062 .063 .003 .064 4 .065				.037 .034 .015 .059 19 .064	15
10		.030 .028 .006 .036 16 .040	.029 .030 .003 .032 6 .033							.029 .028 .005 .032 24 .040	10
5		.025 .025 .002 .026 12 .030	.012 .016 .010 .020 5 .024	.038 1						.022 .025 .009 .028 18 .033	5
0		.027 .027 .003 .031 10 .031	.017 .012 .018 .036 6 .043	.019 .018 .009 .028 4 .032						.023 .024 .012 .031 20 .040	0
5		.028 .028 .002 .028 10 .028	.039 .039 .004 .042 6 .045	.020 .024 .010 .029 15 .030						.025 .027 .010 .032 31 .043	5
10		.032 .030 .004 .037 6 .039	.040 .040 .005 .043 2 .044	.016 .015 .009 .024 20 .034						.021 .019 .011 .033 28 .041	10
15		.041 .040 .003 .043 8 .045	.018 .018 .001 .020 11 .021	.012 .014 .008 .022 8 .024			.059 .055 .010 .066 4 .075			.027 .019 .017 .044 29 .065	15
20		.060 .060 .005 .055 5 .056	.024 .021 .004 .027 3 .030	.020 .018 .013 .029 10 .046			.078 .079 .011 .084 5 .088			.039 .033 .025 .065 23 .085	20
25				.041 .036 .022 .059 14 .061			.064 .062 .025 .088 4 .092			.046 .036 .024 .077 18 .089	25
30			.161 1	.082 .056 .035 .101 18 .112			.043 .041 .012 .053 5 .060			.062 .054 .038 .101 24 .141	30
35			.136 .117 .071 .162 9 .294	.101 .101 .034 .124 2 .134						.130 .117 .067 .150 11 .288	35
40											40
45S											45S

LONGITUDE

TABLE IX. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65					.285 .006 2 .285 .290 .293		.286 .017 2 .286 .297 .301	.205 .125 15 .196 .368 .382		.222 .116 19 .264 .347 .382	65
60					.169 .109 9 .161 .303 .311	.148 .094 62 .120 .249 .339		.152 .151 17 .059 .359 .386		.151 .109 87 .106 .278 .375	60
55					.315 .016 4 .321 .329 .332	.124 .084 82 .085 .244 .313	.103 .064 114 .077 .171 .310	.108 .067 161 .085 .156 .302		.112 .074 361 .085 .179 .317	55
50				.058 .031 13 .045 .068 .127	.163 .102 36 .141 .306 .368	.128 .096 78 .076 .239 .333	.097 .068 189 .062 .171 .266	.102 .047 106 .094 .162 .203		.109 .076 424 .075 .177 .329	50
45	.117 .045 14 .101 .175 .200			.069 .038 56 .058 .107 .127	.106 .094 36 .072 .163 .342	.075 .038 95 .061 .096 .204	.079 .042 86 .062 .101 .214	.058 .017 19 .057 .073 .087		.080 .051 306 .062 .105 .223	45
40	.087 .037 43 .078 .117 .183		.043 .011 20 .047 .049 .066	.157 .059 13 .159 .219 .229	.070 .066 83 .046 .096 .323	.067 .057 96 .047 .089 .267	.064 .031 24 .054 .099 .126	.099 .010 5 .100 .108 .111		.073 .067 284 .044 .112 .267	40
35	.064 .022 9 .051 .065 .100		.050 .012 15 .050 .061 .070	.053 .020 8 .045 .074 .093	.058 .024 199 .057 .077 .109	.085 .064 4 .059 .138 .184				.058 .025 235 .056 .078 .110	35
30	.042 .006 3 .046 .049 .050	.041 .006 11 .042 .048 .056	.047 1	.060 .011 18 .060 .070 .082	.036 .019 97 .039 .054 .072					.040 .019 130 .041 .060 .073	30
25		.046 .009 12 .044 .050 .069	.079 1		.032 .018 66 .030 .050 .074	.054 .001 3 .054 .056 .056				.035 .019 102 .034 .053 .075	25
20		.040 .005 6 .042 .044 .047	.060 .024 2 .060 .075 .082		.024 .011 25 .025 .035 .042	.050 .006 7 .062 .063 .071				.035 .018 42 .030 .052 .074	20
15		.027 .008 7 .033 .033 .033	.020 .002 5 .021 .022 .022		.027 .009 6 .027 .031 .032	.046 .007 12 .046 .055 .056				.034 .012 30 .030 .046 .057	15
10		.031 .006 5 .028 .034 .041	.014 .001 4 .014 .015 .015			.048 .007 8 .046 .053 .054				.034 .014 17 .031 .048 .054	10
5		.028 .003 6 .028 .031 .033	.014 .002 5 .013 .015 .017	.029 .007 6 .026 .034 .041						.024 .008 16 .020 .030 .039	5
0		.022 1	.015 .000 4 .015 .016 .016	.034 .005 6 .037 .037 .039						.026 .010 11 .024 .037 .039	0
5		.031 .006 4 .031 .035 .036	.018 .002 3 .019 .020 .020	.022 .015 6 .025 .036 .036			.044 .005 6 .043 .050 .051			.029 .014 21 .036 .042 .051	5
10		.030 .003 6 .029 .033 .036	.019 .001 7 .019 .021 .021	.015 .012 18 .009 .030 .039			.051 .006 13 .050 .057 .060			.028 .016 44 .019 .050 .059	10
15		.035 .014 6 .029 .037 .061	.022 0.000 2 .022 .022 .022	.006 .003 14 .006 .007 .009			.052 .002 6 .053 .055 .055			.022 .021 28 .014 .051 .060	15
20		.061 .005 7 .063 .065 .066	.022 .001 6 .022 .023 .025	.016 .016 15 .009 .028 .049			.050 1			.034 .029 29 .022 .078 .085	20
25			.046 .027 12 .026 .050 .063	.032 .019 10 .029 .048 .066						.039 .025 22 .024 .074 .083	25
30			.076 .045 11 .063 .136 .147	.034 1						.072 .044 12 .061 .133 .147	30
35			.096 .026 15 .092 .112 .169							.098 .026 15 .092 .112 .159	35
40			.169 1							.169 1	40
45S											45S

LONGITUDE

TABLE IX. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N							.400 .031 12 .392 .432 .443			.400 .031 12 .392 .432 .443	70N
65					.238 .097 60 .238 .349 .374	.336 .043 6 .364 .386 .383	.308 .067 24 .294 .412 .489	.342 .063 13 .383 .381 .444		.273 .098 103 .269 .370 .455	65
60				.197 .101 14 .219 .292 .336	.260 .091 48 .276 .352 .375	.256 .107 55 .293 .367 .396	.256 .124 30 .206 .390 .424	.198 .096 26 .219 .301 .335		.244 .107 172 .205 .352 .404	60
55				.249 .100 82 .264 .343 .378	.336 .054 21 .350 .384 .395	.156 .098 44 .125 .266 .369	.207 .126 80 .188 .352 .423	.157 .098 87 .141 .235 .413		.206 .115 314 .136 .343 .412	55
50				.083 .082 118 .085 .139 .366	.257 .104 57 .289 .367 .390	.178 .085 64 .173 .261 .356	.111 .086 87 .069 .205 .323	.091 .048 78 .090 .149 .193		.134 .101 384 .087 .244 .379	50
45				.087 .085 157 .085 .152 .306	.086 .064 53 .077 .149 .214	.082 .054 43 .070 .131 .204	.080 .050 134 .063 .120 .230	.080 .020 19 .062 .078 .100		.083 .056 406 .053 .129 .255	45
40	.104 .009 6 .102 .109 .120		.049 .044 78 .036 .059 .212	.083 .057 114 .065 .120 .260	.075 .055 74 .061 .125 .246	.075 .050 227 .065 .111 .216	.069 .023 23 .064 .098 .105	.120 .048 16 .126 .160 .219		.075 .052 538 .043 .112 .240	40
35	.146 .008 2 .146 .151 .153		.048 .022 82 .047 .063 .105	.043 .018 3 .048 .058 .061	.056 .032 170 .049 .065 .132	.069 .036 26 .068 .112 .116				.056 .032 263 .049 .087 .133	35
30		.071 .011 4 .073 .081 .082	.062 .014 10 .063 .072 .082	.056 .036 10 .046 .062 .138	.038 .022 181 .033 .056 .092	.067 1				.041 .024 206 .035 .066 .095	30
25		.083 .009 14 .084 .081 .086			.026 .014 121 .024 .042 .056	.043 1				.029 .016 136 .027 .043 .063	25
20		.045 .009 18 .044 .054 .061	.038 .004 4 .038 .042 .045		.025 .016 15 .026 .046 .054		.083 .006 2 .083 .087 .089			.038 .018 37 .037 .053 .080	20
15		.038 .006 11 .038 .044 .047	.030 .003 6 .029 .033 .035		.016 .009 21 .014 .021 .039		.079 .011 5 .062 .086 .093			.031 .021 43 .028 .044 .086	15
10		.037 .001 7 .037 .038 .038	.036 .003 7 .036 .038 .040	.017 .009 8 .020 .025 .027	.018 .010 17 .018 .023 .041	.086 .005 3 .087 .060 .062	.056 .007 11 .058 .063 .067			.033 .018 53 .035 .054 .065	10
5				.017 .009 17 .018 .026 .031	.025 .002 2 .025 .026 .027		.054 .007 10 .056 .060 .061			.030 .019 29 .024 .056 .060	5
0				.022 .006 12 .024 .028 .030			.061 .008 9 .059 .065 .078			.039 .020 21 .028 .060 .075	0
5				.017 .004 6 .019 .020 .021			.061 .004 11 .061 .064 .070			.046 .021 17 .038 .063 .060	5
10				.034 .005 4 .036 .038 .039			.046 .008 6 .042 .057 .060			.042 .009 10 .039 .051 .059	10
15			.020 .003 2 .020 .022 .023	.023 .002 5 .024 .024 .025			.047 .006 7 .050 .052 .053			.035 .013 14 .029 .051 .053	15
20			.018 .003 4 .020 .021 .021	.029 .012 6 .030 .039 .046			.052 .005 5 .052 .057 .058			.034 .016 15 .035 .052 .058	20
25			.016 .003 4 .016 .018 .019	.073 .034 13 .061 .106 .148						.060 .038 17 .058 .097 .142	25
30			.054 .032 6 .047 .075 .114	.129 .047 9 .144 .168 .193						.099 .056 15 .090 .163 .189	30
35			.243 .120 9 .267 .387 .424	.285 .090 3 .301 .323 .333						.246 .113 12 .208 .354 .423	35
40			.212 1							.212 1	40
45S											45S

LONGITUDE

TABLE IX. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.434 .013 3 .427 .444 .461	.367 .024 3 .369 .387 .395			.401 .038 6 .409 .432 .450	70N
65				.394 .038 5 .374 .431 .456	.288 .094 126 .320 .366 .416	.384 .064 11 .424 .442 .456	.391 .026 6 .398 .416 .422			.304 .097 150 .322 .390 .450	65
60				.320 .087 82 .336 .404 .461	.283 .101 182 .289 .366 .428	.265 .092 39 .279 .348 .369	.357 .111 51 .406 .451 .489	.339 .077 43 .385 .415 .476		.296 .103 397 .312 .388 .460	60
55				.293 .103 102 .292 .385 .483	.262 .115 51 .316 .360 .390	.236 .098 40 .241 .331 .442	.244 .147 53 .183 .451 .509	.225 .109 79 .215 .366 .403		.256 .117 325 .250 .385 .465	55
50				.206 .129 104 .176 .374 .430	.210 .103 112 .182 .342 .389	.138 .047 40 .134 .175 .246	.126 .080 59 .101 .206 .329	.223 .119 8 .182 .364 .373		.185 .110 323 .155 .326 .410	50
45			.139 .018 6 .135 .158 .166	.162 .097 127 .143 .285 .382	.158 .117 55 .113 .334 .391	.103 .059 45 .086 .145 .246	.102 .064 69 .068 .155 .269	.064 .011 19 .063 .073 .087		.134 .092 321 .114 .229 .372	45
40	.069 .015 14 .064 .079 .105		.121 .024 14 .123 .146 .156	.090 .067 93 .072 .171 .262	.083 .048 62 .078 .109 .159	.089 .035 191 .083 .100 .154	.093 .056 6 .073 .137 .191			.079 .048 382 .052 .116 .210	40
35	.056 .003 6 .057 .059 .059		.042 .022 10 .027 .061 .086	.078 .014 10 .077 .083 .089	.083 .028 19 .071 .086 .108	.082 .040 48 .078 .112 .173	.083 .012 6 .066 .070 .074			.071 .034 99 .066 .103 .158	35
30	.060 .017 4 .059 .072 .083	.087 .009 5 .082 .093 .104	.082 .028 8 .035 .086 .095	.048 .021 39 .044 .071 .090	.049 .030 52 .043 .065 .137	.079 .011 10 .078 .085 .101	.081 .012 6 .079 .095 .097			.055 .027 124 .036 .082 .111	30
25	.086 1	.086 .010 4 .068 .078 .079	.044 .015 39 .040 .058 .061	.040 .013 30 .037 .060 .067	.046 .021 28 .043 .072 .081	.044 .012 5 .044 .052 .061	.062 .006 4 .060 .066 .069			.045 .017 111 .043 .063 .083	25
20			.054 .019 19 .057 .065 .083				.051 .011 8 .055 .061 .063			.053 .017 25 .057 .063 .083	20
15		.054 1	.028 .016 12 .026 .043 .060				.053 .010 5 .051 .062 .067			.036 .016 18 .031 .056 .066	15
10		.029 .010 11 .030 .039 .042	.027 .005 14 .025 .032 .037				.048 .002 5 .049 .050 .051			.031 .010 30 .029 .043 .050	10
5		.030 .009 2 .030 .035 .036			.044 .006 6 .047 .048 .049		.059 .013 6 .065 .069 .070			.048 .014 14 .044 .067 .070	5
0		.013 1			.046 .006 12 .047 .062 .067		.047 .011 12 .041 .067 .071			.045 .011 25 .043 .052 .070	0
5					.044 .002 6 .043 .047 .049		.051 .010 6 .054 .059 .064			.048 .008 16 .043 .058 .063	5
10					.044 1		.042 .005 4 .040 .046 .050			.042 .005 5 .040 .047 .050	10
15											15
20											20
25											25
30											30
35				.212 .127 18 .168 .371 .390						.212 .127 12 .168 .371 .390	35
40											40
45S											45S

LONGITUDE

TABLE IX. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 410

LAT	15E			60E			105E			150E			165W			120W			75W			30W			15E			MEAN			LAT
70N																														70N
65													.250 .241	.024 .278	9 .282	.294		1							.254 .254	.026 .261	10 .292	65
60										.366 .366	.043 .414	27 .440	.335 .333	.071 .411	36 .484	.249 .231	.065 .318	30 .377	.259 .242	.156 .442	21 .518	.159 .134	.066 .277	13 .319	.291 .298	.106 .401	129 .488	60
55										.279 .286	.112 .390	97 .470	.113 .108	.036 .146	15 .177	.271 .279	.099 .365	63 .450	.292 .286	.096 .416	56 .459	.269 .304	.096 .380	65 .437	.273 .270	.108 .382	296 .459	55
50										.261 .241	.128 .403	133 .516	.135 .121	.096 .191	81 .414	.228 .205	.109 .352	104 .429	.221 .180	.104 .357	89 .418	.247 .232	.113 .378	39 .453	.221 .139	.120 .365	446 .475	50
45	.182 .190	.058 .236	8 .265				.227 .225	.110 .336	18 .426	.180 .150	.115 .297	167 .456	.169 .157	.087 .264	139 .377	.171 .127	.104 .274	70 .411	.163 .119	.090 .250	37 .375	.165 .163	.037 .196	4 .216	.176 .156	.102 .282	441 .427	45
40	.124 .115	.033 .130	12 .208				.113 .102	.065 .174	70 .274	.107 .076	.089 .236	90 .327	.173 .134	.105 .259	100 .441	.132 .096	.083 .210	55 .342	.183 .134	.090 .290	5 .301				.134 .065	.092 .223	332 .412	40
35	.039 .061	.006 .062	6 .065				.079 .088	.027 .102	38 .114	.086 .080	.011 .095	9 .101	.083 .088	.043 .124	17 .169	.064 .056	.024 .075	19 .126							.077 .077	.031 .102	83 .144	35
30	.062 .063	.004 .065	5 .067				.102 .103	.006 .106	7 .108				.070 .069	.009 .080	8 .083										.079 .077	.018 .103	20 .107	30
25	.062 .060	.007 .067	7 .078	.090 .090	.006 .083	2 .096	.040 .029	.030 .069	45 .107	.036 .040	.011 .046	4 .047	.083 .064	.017 .071	15 .100										.048 .053	.028 .072	73 .108	25
20				.075 .076	.003 .078	8 .079	.052 .047	.024 .082	30 .100				.026 .024	.002 .027	6 .030										.053 .047	.024 .078	43 .099	20
15							.027 .022	.015 .048	25 .052				.023 .022	.005 .025	6 .031										.026 .022	.014 .046	31 .052	15
10				.020 .017	.012 .032	5 .036	.022 .023	.006 .028	25 .035				.029 .026	.006 .034	8 .037										.023 .023	.008 .030	35 .037	10
5				.031 .037	.016 .044	5 .048	.032 .028	.014 .043	8 .055				.049 .050	.002 .050	6 .051										.036 .036	.015 .050	18 .055	5
0																														0
5													.046		1										.046		1	5
10										.032 .031	.005 .036	5 .040	.040		1										.034 .033	.005 .040	6 .040	10
15										.031 .032	.002 .033	7 .033													.031 .032	.002 .033	7 .033	15
20										.035 .036	.003 .038	6 .038													.035 .036	.003 .038	6 .038	20
25										.062 .053	.024 .090	5 .092													.062 .053	.024 .090	5 .092	25
30										.159 .163	.040 .191	4 .208													.159 .163	.040 .191	4 .208	30
35										.154 .112	.082 .252	17 .316													.154 .112	.082 .252	17 .316	35
40																														40
45S																														45S

LONGITUDE

TABLE IX. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60				.300 .286 .073 .366 4 .404						.300 .286 .073 .366 4 .404
55				.375 .420 .114 .479 10 .498		.282 .324 .081 .347 6 .363	.443 .439 .044 .484 7 .491			.372 .406 .108 .478 23 .498
50				.258 .281 .127 .373 16 .485	.134 1	.122 .137 .035 .150 16 .166	.370 .371 .105 .461 14 .525			.243 .187 .139 .393 47 .518
45			.118 .081 .079 .223 12 .270	.195 .190 .118 .311 33 .411	.198 .186 .070 .265 19 .322	.137 .130 .040 .157 51 .220	.142 .122 .047 .208 25 .242			.158 .129 .080 .250 140 .378
40			.091 .064 .085 .130 55 .216	.042 .030 .020 .068 28 .082	.152 .107 .092 .301 22 .327	.092 .092 .018 .106 30 .129	.074 1			.090 .062 .062 .121 137 .309
35			.067 .058 .024 .074 30 .107	.074 .078 .014 .064 8 .092	.115 .089 .068 .170 3 .203					.064 .066 .032 .078 41 .156
30										
25	.090 .088 .009 .099 8 .108	.084 .084 .006 .088 2 .090								.089 .088 .009 .096 10 .107
20		.042 .039 .006 .049 8 .052	.037 .039 .019 .066 8 .099							.040 .039 .013 .052 14 .058
15			.016 .017 .009 .021 17 .035							.016 .017 .009 .021 17 .035
10			.026 .024 .011 .034 20 .050							.026 .024 .011 .034 20 .050
5		.018 .016 .003 .020 8 .024	.017 .016 .004 .020 8 .025							.017 .016 .004 .020 11 .026
0										
5										
10										
15										
20										
25										
30										
35										
40										
45S										

LONGITUDE

TABLE X. - GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(a) Flight level 290

CONE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55								.111 .087 9 .078 .146 .310		.111 .087 9 .078 .146 .310
50					.027 1	.079 1		.050 .010 24 .047 .082 .073		.050 .012 26 .047 .064 .076
45	.046 .006 8 .038 .051 .065				.030 1	.056 .008 3 .053 .063 .066	.056 .025 11 .047 .078 .116	.043 .010 7 .040 .045 .063		.050 .018 30 .042 .060 .097
40	.064 .018 17 .067 .077 .097				.046 .010 7 .045 .048 .066	.060 .032 13 .070 .086 .117	.061 .026 4 .050 .061 .102			.059 .024 41 .061 .081 .109
35	.047 .012 6 .046 .052 .067		.041 .014 7 .040 .056 .065		.042 .016 5 .032 .055 .070	.047 .017 6 .046 .061 .073				.044 .015 24 .037 .060 .074
30	.042 .003 7 .041 .046 .047	.042 .011 13 .044 .047 .056			.098 .008 2 .096 .101 .103					.047 .018 22 .041 .051 .096
25	.048 .017 3 .057 .060 .062				.033 .003 3 .033 .035 .036					.040 .014 6 .030 .058 .062
20			.041 1		.031 .019 10 .031 .040 .071					.032 .018 11 .033 .041 .070
15				.012 1	.012 .002 2 .012 .013 .013					.012 .001 3 .012 .013 .013
10										
5										
0			.023 1						.023 1	
5										
10										
15										
20				.073 1					.079 1	
25										
30			.053 1	.058 .011 7 .060 .070 .072					.057 .011 8 .054 .070 .072	
35				.054 .018 4 .060 .066 .069					.054 .018 4 .060 .066 .069	
40										
45S										

LONGITUDE

TABLE X. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.228 .003 3 .229 .231 .232	.156 .091 10 .166 .252 .261			.172 .085 13 .229 .243 .261	70N
65						.257 .028 4 .266 .280 .280	.056 .009 12 .056 .071 .072	.127 .051 9 .123 .188 .202		.115 .077 25 .072 .203 .280	65
60							.048 .002 4 .049 .049 .049	.090 .059 21 .060 .169 .212		.083 .056 25 .056 .164 .209	60
55					.056 .017 9 .044 .074 .088		.166 .066 11 .201 .210 .224	.074 .045 35 .057 .101 .208		.089 .061 55 .068 .192 .226	55
50					.072 .043 4 .053 .107 .139	.213 .024 4 .213 .235 .241	.109 .023 8 .118 .130 .134	.064 .029 49 .052 .079 .154		.078 .047 62 .055 .120 .221	50
45	.052 .005 8 .053 .057 .057			.038 .005 5 .040 .041 .044	.051 .017 23 .049 .062 .092	.078 .049 28 .059 .112 .215	.072 .035 3 .078 .100 .110	.054 1 .054		.062 .036 68 .042 .092 .173	45
40	.100 .047 10 .092 .148 .181		.047 .003 5 .046 .051 .051	.044 .010 12 .042 .054 .060	.066 .040 23 .056 .094 .169	.082 .066 31 .047 .156 .246	.061 .032 11 .054 .072 .137	.047 .002 3 .048 .049 .050		.070 .050 95 .051 .111 .218	40
35	.049 .015 5 .053 .061 .070		.063 .029 10 .055 .093 .118		.044 .036 19 .033 .057 .145	.035 .014 10 .036 .049 .057				.047 .030 44 .039 .062 .126	35
30	.054 .011 11 .059 .062 .070			.100 .042 9 .126 .140 .147	.025 .006 18 .026 .029 .036					.051 .037 38 .034 .068 .144	30
25	.044 .002 3 .044 .046 .047			.050 .011 10 .050 .062 .067	.033 .013 15 .032 .046 .056					.040 .014 28 .031 .055 .066	25
20		.053 1	.026 .005 7 .029 .031 .032		.037 .016 18 .039 .049 .069					.035 .015 26 .033 .047 .068	20
15		.060 .060 6 .031 .079 .179	.027 .011 15 .033 .036 .040		.015 .001 7 .015 .018 .016					.031 .033 28 .015 .036 .116	15
10		.041 .002 5 .042 .043 .044	.041 .003 6 .040 .045 .045	.015 .001 7 .014 .016 .017	.014 .004 2 .014 .017 .018					.029 .013 20 .027 .043 .045	10
5				.016 .004 7 .015 .017 .023						.016 .004 7 .015 .017 .023	5
0				.019 .005 6 .021 .021 .022						.019 .005 6 .021 .021 .022	0
5											5
10											10
15				.016 .016 2 .018 .027 .031						.016 .016 2 .016 .027 .031	15
20			.073 .023 9 .083 .089 .091	.123 1						.078 .026 10 .085 .091 .117	20
25			.091 .017 6 .086 .112 .116							.091 .017 6 .086 .112 .116	25
30			.074 .022 15 .083 .098 .102							.074 .022 15 .083 .098 .102	30
35	.028 0.000 2 .028 .028 .028		.057 .028 6 .062 .082 .101	.071 .060 9 .058 .076 .208						.061 .049 17 .057 .078 .190	35
40				.064 1						.064 1	40
45S											45S

LONGITUDE

TABLE X. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.325 1	.152 .130 .096 .261 17 .303			.161 .141 .102 .283 18 .320
65						.181 .088 .129 .333 17 .345	.137 .087 .112 .303 26 .331	.108 .081 .085 .249 19 .288		.132 .087 .111 .293 62 .340
60					.300 1	.146 .127 .100 .296 23 .322	.287 .296 .027 .312 17 .320	.160 .149 .093 .263 27 .308		.189 .218 .103 .303 68 .322
55				.113 .107 .035 .156 10 .188	.238 .260 .087 .281 8 .284	.092 .065 .047 .164 17 .183	.163 .149 .095 .283 46 .320	.100 .072 .065 .187 38 .256		.122 .086 .080 .221 167 .293
50				.085 .062 .062 .166 15 .196	.121 .084 .088 .213 22 .336	.121 .123 .082 .127 11 .235	.084 .009 .040 .112 87 .196	.091 .067 .042 .102 45 .207		.090 .072 .053 .127 180 .237
45				.089 .081 .029 .101 14 .116	.041 .039 .008 .047 6 .053	.106 .044 .092 .193 5 .257	.092 .071 .035 .119 77 .164	.094 .091 .038 .122 5 .157		.079 .066 .040 .118 107 .173
40	.086 .072 .041 .122 12 .165		.091 .074 .034 .123 12 .126	.078 .066 .036 .120 8 .123	.049 .039 .017 .069 14 .074	.066 .064 .030 .086 40 .153	.070 .069 .021 .078 10 .116			.069 .064 .032 .107 93 .153
35	.060 .056 .028 .067 28 .125		.037 .034 .020 .052 15 .080		.062 .051 .034 .080 31 .156	.056 .032 .054 .103 5 .148				.057 .049 .033 .082 97 .154
30	.045 .044 .003 .046 7 .050	.083 .063 .002 .064 2 .065			.046 .044 .027 .072 67 .098	.079 .079 .006 .083 2 .085				.047 .045 .026 .072 78 .096
25	.067 .066 .004 .071 5 .074	.066 .066 0.000 .066 2 .066	.035 1	.033 .033 .008 .036 14 .042	.040 .036 .026 .053 58 .134					.041 .036 .024 .062 80 .117
20		.067 .057 .016 .068 11 .084	.040 .037 .009 .048 4 .062		.038 .029 .025 .043 10 .092					.045 .042 .022 .065 25 .096
15		.027 .028 .003 .030 6 .032	.047 .047 .002 .048 2 .048							.032 .029 .009 .043 8 .048
10			.043 1							.043 1
5		.025 1	.019 .021 .004 .022 6 .022							.019 .021 .004 .022 7 .025
0			.014 .011 .007 .013 6 .028							.014 .011 .007 .013 8 .029
5			.027 .026 .014 .036 17 .055	.021 .020 .005 .027 14 .030						.024 .025 .011 .030 31 .053
10			.031 .026 .006 .036 16 .042	.022 .022 .009 .030 14 .036						.027 .026 .009 .036 30 .042
15			.028 .029 .012 .039 8 .044	.028 .022 .008 .035 7 .040						.027 .027 .011 .039 15 .044
20		.067 .072 .013 .077 6 .082	.069 .062 .022 .079 22 .099	.020 .017 .013 .037 10 .042						.050 .046 .026 .076 38 .099
25			.084 .084 .024 .100 30 .133	.078 .074 .048 .096 25 .202						.081 .083 .037 .100 55 .175
30			.074 .079 .018 .085 12 .088	.104 .091 .058 .149 42 .262						.097 .084 .053 .130 54 .255
35	.036 .035 .005 .040 4 .042			.094 .071 .081 .103 18 .321						.084 .083 .076 .097 22 .300
40										
45S										

LONGITUDE

TABLE X. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(d) Flight level 350

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

OCTOBER
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.326 .025 13 .327 .353 .366	.167 .089 23 .217 .277 .300	.284 .025 6 .279 .312 .321		.244 .093 42 .267 .326 .360
65					.227 .065 39 .244 .286 .310	.268 .071 37 .274 .335 .354	.281 .062 13 .314 .335 .379	.295 .007 6 .295 .299 .307		.256 .070 95 .257 .325 .358
60				.284 .067 17 .273 .360 .366	.279 .079 12 .317 .333 .348	.164 .087 60 .210 .262 .330	.163 .076 21 .177 .232 .256	.120 .112 27 .058 .286 .320		.189 .102 157 .213 .300 .378
55				.263 .066 32 .261 .328 .383	.232 .055 14 .254 .286 .296	.127 .082 75 .117 .226 .294	.103 .077 25 .094 .111 .308	.107 .086 66 .057 .222 .292		.145 .096 212 .086 .267 .336
50				.169 .122 20 .173 .336 .367	.176 .043 20 .186 .201 .210	.096 .070 52 .071 .185 .254	.116 .071 100 .093 .193 .294	.072 .034 89 .059 .102 .161		.108 .075 281 .077 .189 .302
45	.055 .011 15 .053 .059 .079		.080 .012 2 .080 .088 .092	.110 .090 25 .084 .165 .318	.134 .087 49 .156 .224 .239	.102 .090 82 .057 .227 .297	.095 .066 79 .080 .118 .347	.037 .003 9 .038 .039 .040		.101 .081 261 .072 .206 .306
40	.065 .025 36 .059 .082 .126		.063 .017 14 .069 .074 .096	.102 .048 6 .117 .145 .163	.064 .041 71 .046 .116 .142	.073 .071 155 .041 .135 .293	.084 .019 8 .081 .106 .108	.049 .018 4 .050 .067 .070		.070 .057 294 .038 .116 .280
35	.057 .021 44 .054 .082 .101		.056 .049 44 .044 .086 .194	.080 .015 15 .043 .062 .084	.086 .031 143 .048 .079 .150	.056 .040 27 .056 .073 .175		.066 .024 17 .058 .087 .117		.057 .033 290 .043 .079 .152
30	.059 .020 7 .056 .075 .093	.088 .020 7 .091 .107 .108	.043 .034 26 .036 .044 .145	.053 .019 40 .063 .071 .091	.053 .043 201 .041 .070 .193	.079 1		.051 .011 34 .052 .063 .073		.053 .037 327 .043 .072 .180
25	.072 .023 12 .083 .095 .097	.067 .018 37 .082 .078 .093	.040 .012 31 .040 .053 .069	.032 .011 10 .033 .039 .048	.037 .025 191 .034 .055 .101			.052 .005 27 .051 .057 .061		.042 .024 308 .039 .056 .097
20		.047 .015 40 .042 .066 .087	.047 .012 5 .043 .060 .065		.027 .018 95 .026 .045 .073			.054 .003 9 .052 .056 .060		.035 .020 149 .033 .056 .074
15		.031 .006 24 .032 .035 .041	.048 .011 12 .049 .057 .066	.017 .005 3 .019 .022 .023	.013 .008 51 .015 .019 .029					.022 .015 90 .019 .035 .057
10		.027 .009 17 .025 .032 .046	.027 .013 9 .022 .040 .052	.010 .008 11 .010 .016 .023	.013 .009 20 .012 .016 .034					.019 .012 57 .017 .029 .047
5		.027 .004 6 .029 .030 .032	.015 .002 5 .015 .017 .018	.010 .009 17 .010 .018 .026	.007 .003 7 .008 .009 .012					.013 .010 35 .013 .025 .031
0			.014 .010 14 .017 .021 .032	.016 .010 19 .019 .026 .027	.013 .004 8 .013 .017 .019					.015 .010 39 .017 .025 .029
5			.014 .018 18 .008 .025 .049	.019 .003 11 .018 .020 .027						.016 .013 27 .017 .025 .047
10			.026 .021 18 .029 .050 .058	.019 .005 13 .019 .025 .027						.023 .016 29 .019 .040 .055
15			.033 .020 18 .030 .044 .078	.025 .012 29 .023 .039 .051						.028 .015 44 .026 .042 .059
20			.036 .026 22 .030 .061 .084	.041 .029 40 .037 .066 .117						.040 .028 62 .032 .064 .112
25			.064 .034 16 .064 .096 .107	.091 .070 72 .084 .141 .300						.087 .066 88 .078 .117 .292
30			.184 .111 4 .112 .250 .340	.126 .089 52 .102 .229 .349						.129 .092 56 .102 .230 .353
35			.080 .066 19 .055 .116 .263	.114 .111 45 .070 .136 .456						.104 .101 64 .066 .128 .440
40	.045 .011 31 .041 .056 .071		.056 0.000 2 .055 .088 .055	.094 1						.047 .014 34 .043 .056 .089
45S	.051 .007 22 .050 .058 .062									.051 .007 22 .050 .058 .062

LONGITUDE

TABLE X. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(e) Flight level 370

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

OCTOBER
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N					.298 .287 .039 .339 23 .367		.227 .227 .012 .235 2 .239			.292 .286 .042 .337 25 .367
65					.256 .262 .059 .299 85 .386	.223 .247 .060 .261 16 .266	.197 .184 .043 .250 12 .262	.238 .252 .022 .256 5 .259		.245 .237 .059 .295 118 .364
60				.246 .246 .100 .313 2 .341	.246 .247 .050 .271 41 .369	.158 .148 .089 .277 29 .327	.217 .186 .076 .319 9 .328	.189 .210 .093 .263 7 .267		.211 .217 .082 .285 86 .351
55				.287 .294 .077 .377 40 .393	.219 .236 .041 .256 46 .263	.184 .197 .089 .276 37 .317	.252 .246 .086 .337 22 .381	.129 .112 .070 .185 33 .295		.215 .207 .091 .303 178 .386
50				.209 .201 .091 .319 84 .368	.116 .107 .082 .209 82 .361	.132 .087 .082 .233 29 .304	.171 .148 .112 .326 120 .394	.128 .117 .082 .219 116 .305		.151 .136 .100 .255 411 .371
45	.028 .029 .002 .029 8 .030		.218 .196 .047 .251 4 .293	.148 .118 .107 .284 104 .366	.074 .059 .050 .129 37 .194	.090 .084 .060 .136 93 .260	.121 .094 .079 .195 150 .327	.106 .119 .033 .133 34 .135		.115 .071 .083 .193 430 .347
40	.129 .126 .036 .163 11 .195		.134 .122 .064 .220 32 .275	.082 .060 .052 .142 97 .220	.061 .052 .038 .093 78 .168	.106 .083 .070 .179 558 .276	.161 .125 .080 .260 17 .316	.143 .147 .012 .156 26 .163		.103 .082 .066 .173 819 .274
35	.093 .077 .030 .112 4 .141		.049 .041 .022 .066 28 .107	.061 .067 .023 .086 38 .094	.064 .055 .037 .080 418 .160	.071 .057 .052 .113 84 .205		.139 .139 .008 .147 7 .151		.065 .065 .039 .094 575 .176
30	.100 .110 .022 .120 9 .123		.040 1	.039 .037 .012 .050 32 .065	.056 .046 .037 .079 481 .166	.091 .095 .017 .105 3 .108				.055 .047 .036 .079 526 .175
25		.115 1		.031 .032 .003 .032 7 .034	.040 .035 .022 .058 283 .091					.040 .035 .023 .058 291 .092
20		.071 .094 .030 .096 7 .101		.074 .069 .020 .098 11 .104	.041 .026 .045 .082 25 .174			.049 .049 .002 .050 2 .051		.054 .041 .040 .094 45 .141
15		.035 .028 .016 .041 6 .071	.022 1		.015 .016 .008 .023 20 .026					.020 .018 .014 .028 27 .053
10		.032 .035 .014 .042 7 .044		.019 .018 .009 .029 8 .031	.013 .017 .010 .022 34 .027					.017 .018 .012 .029 49 .042
5		.011 .001 .020 .026 9 .056		.022 .022 .008 .024 23 .037	.010 .013 .009 .018 25 .026					.015 .016 .012 .024 57 .039
0				.022 .022 .008 .026 24 .031	.007 .002 .010 .018 23 .032					.015 .019 .011 .025 47 .032
5				.020 .020 .007 .024 21 .035	.012 .008 .011 .028 34 .034					.015 .017 .011 .026 55 .037
10				.019 .019 .010 .026 60 .048	.011 .007 .012 .019 11 .038					.018 .016 .011 .027 61 .047
15			.044 .047 .013 .057 5 .061	.018 .018 .008 .025 71 .040	.047 1					.020 .015 .011 .029 77 .051
20			.069 .073 .011 .078 3 .081	.030 .016 .024 .062 61 .086						.032 .016 .025 .062 64 .086
25			.082 .103 .046 .113 4 .121	.059 .018 .057 .129 39 .192						.062 .019 .057 .125 42 .190
30			.236 .160 .151 .420 10 .423	.118 .113 .031 .156 39 .165						.142 .113 .088 .160 49 .421
35			.269 .277 .122 .419 12 .446	.154 .136 .086 .239 21 .349						.203 .165 .120 .344 33 .444
40				.267 1						.267 1
45S										

LONGITUDE

TABLE X. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.353 .077 12 .365 .436 .452	.357 .052 10 .372 .404 .435			.355 .067 22 .324 .426 .450
65				.401 .111 6 .435 .470 .488	.296 .098 74 .288 .401 .477	.318 .050 13 .316 .380 .404				.305 .097 93 .316 .413 .483
60				.292 .080 79 .310 .359 .428	.346 .089 35 .350 .430 .506	.300 .087 22 .307 .387 .425	.160 .092 27 .142 .259 .326	.281 .066 17 .283 .355 .372		.283 .100 180 .172 .376 .467
55				.262 .092 114 .256 .367 .423	.308 .105 30 .366 .398 .434	.235 .060 30 .220 .327 .377	.293 .096 66 .312 .383 .433	.220 .069 143 .219 .315 .384		.255 .097 405 .259 .367 .416
50				.254 .082 29 .260 .340 .424	.214 .096 56 .189 .331 .383	.172 .079 30 .166 .265 .306	.192 .119 59 .179 .345 .375	.202 .125 33 .141 .330 .450		.206 .107 209 .187 .328 .410
45	.090 .016 9 .087 .110 .118		.130 .021 8 .123 .149 .168	.154 .078 87 .145 .219 .353	.105 .062 31 .070 .155 .236	.164 .065 124 .159 .228 .297	.140 .073 66 .116 .200 .334	.119 .059 29 .105 .194 .207		.145 .070 326 .113 .219 .316
40	.139 .022 4 .141 .159 .163		.079 .064 34 .062 .147 .230	.115 .042 50 .118 .163 .178	.078 .041 41 .096 .113 .155	.110 .075 674 .083 .179 .320	.088 .026 7 .069 .117 .123	.047 .012 2 .047 .055 .059		.107 .072 812 .083 .167 .314
35			.029 .021 12 .022 .041 .078	.030 .019 34 .027 .037 .061	.084 .021 7 .076 .105 .117	.088 .043 141 .076 .127 .196				.074 .046 194 .068 .116 .196
30				.228 .051 8 .235 .282 .286	.036 .021 16 .033 .041 .093	.089 .018 9 .097 .105 .108				.097 .083 33 .070 .216 .285
25	.070 .013 2 .070 .079 .082			.106 .021 3 .104 .124 .132	.071 .034 29 .075 .109 .129					.074 .094 34 .074 .114 .131
20					.047 .044 5 .020 .076 .125			.047 .001 16 .048 .048 .049		.047 .021 21 .047 .048 .099
15		.016 1			.018 .017 18 .013 .031 .054			.050 .001 21 .050 .051 .053		.035 .019 40 .049 .050 .065
10		.034 .016 4 .039 .047 .050	.043 1		.011 .011 27 .007 .024 .030			.054 .004 28 .054 .058 .060		.033 .022 60 .022 .055 .060
5					.011 .014 39 .007 .026 .043			.047 .009 29 .047 .058 .060		.027 .021 68 .015 .048 .060
0					.015 .013 59 .015 .025 .048			.050 .006 33 .050 .053 .055		.028 .020 92 .012 .051 .054
5				.001 .001 6 .001 .002 .004	.017 .009 68 .016 .026 .035			.048 .001 19 .048 .048 .048		.022 .016 93 .016 .047 .048
10				.020 .011 61 .016 .032 .040	.019 .007 25 .018 .026 .032			.046 .001 14 .046 .046 .048		.023 .013 100 .016 .040 .047
15				.022 .012 40 .024 .032 .043	.036 .009 4 .037 .043 .046					.023 .012 44 .024 .036 .045
20				.029 .025 27 .021 .048 .092						.029 .025 27 .021 .048 .092
25				.067 .040 24 .074 .102 .147						.067 .040 24 .074 .102 .147
30	.151 1			.136 .073 23 .106 .223 .275						.139 .072 24 .110 .220 .272
35			.143 .081 31 .097 .230 .338	.215 .107 49 .197 .330 .478						.187 .104 80 .147 .282 .472
40				.324 1						.324 1
45S										

LONGITUDE

TABLE X. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N								.522 .562 24 .624		.522 .562 24 .624	70N
65								.395 .397 26 .452		.395 .397 26 .452	65
60				.530 .517 6 .646	.255 .277 14 .365	.234 .226 3 .306	.273 .256 51 .484	.216 .201 56 .374		.257 .206 114 .353 132 .557	60
55				.309 .303 108 .443 50 .504	.234 .265 87 .319 9 .333	.202 .177 63 .280 20 .331	.275 .202 144 .429 67 .610	.145 .123 93 .263 34 .340		.250 .184 130 .393 180 .573	55
50				.264 .248 120 .411 100 .465	.103 .092 87 .184 24 .308	.192 .163 108 .298 84 .469	.231 .204 117 .365 128 .469	.247 .221 122 .378 116 .500		.228 .197 122 .365 452 .492	50
45	.071 .061 037 .090 8 .147		.180 .160 103 .255 13 .411	.167 .166 074 .240 86 .320	.166 .146 099 .259 74 .376	.142 .133 099 .230 96 .415	.245 .277 151 .386 41 .547	.030 .029 003 .033 4 .036		.166 .128 107 .276 322 .427	45
40	.122 .114 040 .146 27 .227		.109 .092 069 .182 45 .272	.144 .126 077 .184 21 .340	.111 .104 074 .194 87 .300	.207 .187 119 .368 239 .387	.076 1			.170 .108 110 .300 394 .390	40
35	.076 .068 023 .091 11 .126		.102 .093 042 .151 17 .184	.059 .053 022 .080 9 .097	.113 .116 043 .184 67 .196	.146 .125 064 .233 31 .280				.112 .112 052 .155 135 .247	35
30	.055 .054 012 .062 14 .083				.076 .061 050 .119 118 .234	.134 .119 044 .166 4 .203				.075 .061 049 .119 136 .229	30
25	.053 .058 020 .076 13 .083	.018 .019 013 .032 6 .038			.080 .055 038 .104 98 .187					.057 .054 037 .084 115 .149	25
20		.012 .011 010 .022 19 .032			.080 .055 022 .068 77 .084					.042 .045 026 .067 96 .082	20
15					.028 .026 017 .043 57 .051					.026 .026 017 .043 57 .051	15
10				.020 .020 002 .021 5 .022	.017 .019 007 .022 41 .023					.017 .020 007 .022 46 .023	10
5					.017 .017 004 .018 37 .022					.017 .017 004 .018 37 .022	5
0					.025 .023 005 .032 26 .035					.025 .023 005 .032 26 .035	0
5											5
10								.062 .062 015 .072 2 .076		.062 .062 015 .072 2 .076	10
15				.056 .057 027 .075 5 .100						.056 .057 027 .075 5 .100	15
20				.053 .026 062 .130 20 .149						.053 .026 062 .130 20 .149	20
25				.041 .026 042 .101 22 .116						.041 .025 042 .101 22 .116	25
30	.138 1			.083 .093 032 .111 18 .123						.086 .100 033 .112 19 .134	30
35			.342 .342 023 .358 2 .364	.263 .222 150 .390 79 .659						.264 .233 149 .387 81 .650	35
40											40
45S				.573 .573 030 .593 2 .601						.573 .573 030 .593 2 .601	45S

LONGITUDE

TABLE X. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60							.759 1	.366 .039 6 .363 .385 .386		.422 .142 7 .384 .400 .714
55							.391 .125 23 .384 .495 .679	.360 .041 39 .360 .388 .450		.372 .084 62 .358 .411 .568
50				.361 .056 3 .360 .407 .426			.310 .157 48 .231 .473 .675			.313 .153 51 .254 .473 .672
45			.256 .103 8 .252 .332 .422	.278 .069 17 .271 .333 .388	.282 .077 7 .229 .350 .351	.329 .144 7 .348 .388 .507	.191 .139 51 .144 .388 .502			.230 .131 90 .137 .377 .507
40			.135 .057 47 .121 .196 .238		.141 .045 23 .122 .185 .244	.077 .121 7 .016 .133 .330	.089 .028 5 .072 .116 .133			.129 .064 82 .097 .190 .268
35			.056 1		.078 .012 12 .061 .085 .095	.003 .002 3 .002 .004 .005				.063 .031 16 .076 .085 .094
30										
25	.029 .023 13 .021 .060 .071	.009 .005 5 .011 .012 .013								.023 .022 18 .013 .051 .070
20		.020 .009 15 .019 .028 .038								.020 .009 15 .019 .028 .038
15										
10										
5										
0										
5										
10								.086 .002 6 .087 .088 .089		.086 .002 6 .087 .088 .089
15								.076 .015 28 .064 .088 .089		.076 .015 28 .063 .088 .089
20								.055 .005 26 .054 .056 .067		.055 .005 26 .054 .056 .067
25				.077 1				.074 .010 24 .074 .087 .090		.074 .010 25 .075 .086 .090
30	.093 .012 20 .093 .104 .119			.088 .022 4 .099 .118 .124						.094 .014 24 .090 .111 .124
35				.307 .184 38 .291 .507 .578						.307 .184 38 .291 .507 .578
40				.326 .095 22 .306 .436 .507						.326 .095 22 .306 .436 .507
45S				.398 .186 22 .343 .551 .648						.398 .186 22 .343 .551 .648

LONGITUDE

TABLE XI. - GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 290

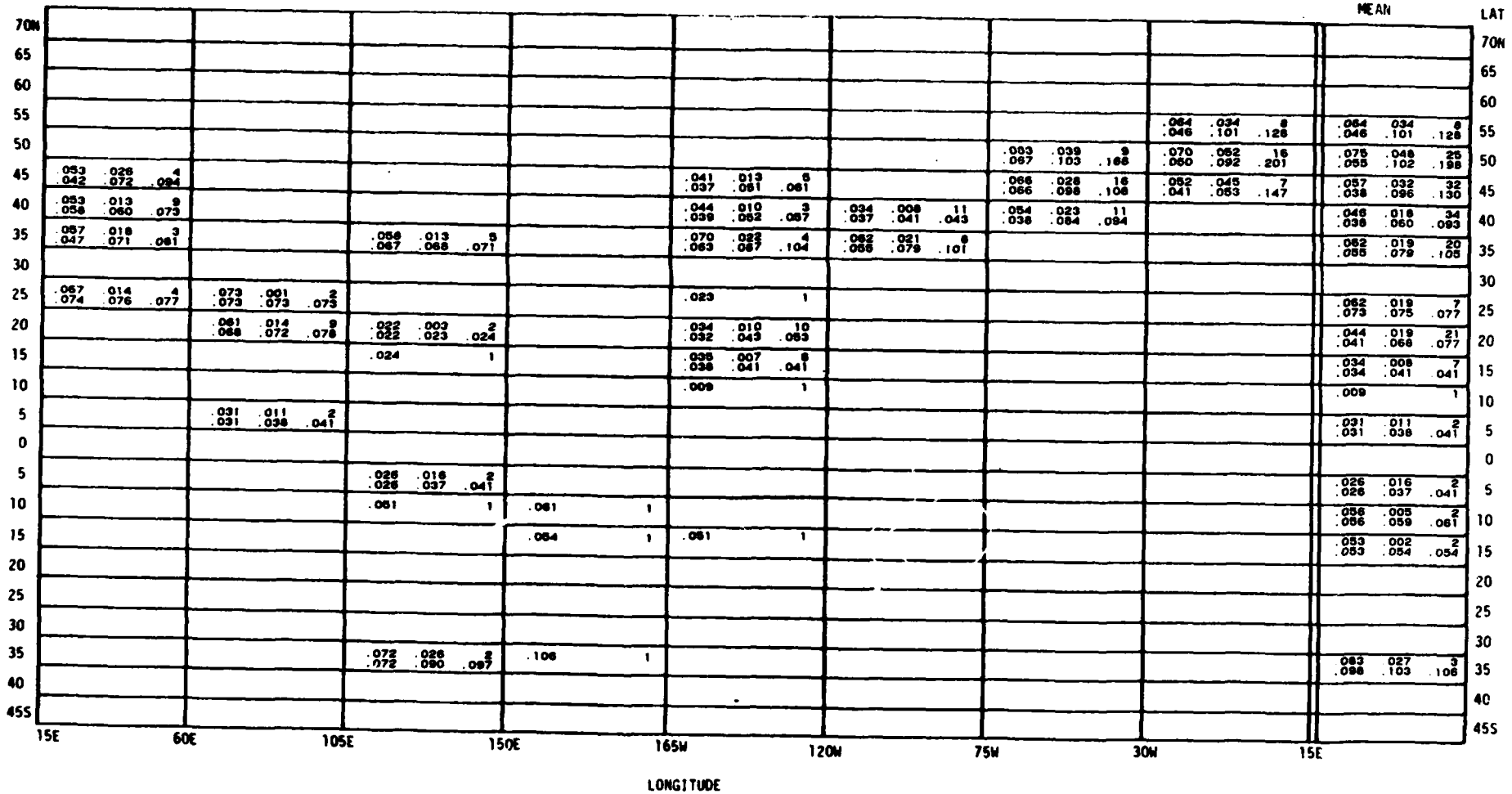


TABLE XI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(b) Flight level 310

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

NOVEMBER
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60							.212 .083 13 .257 .270 .277	.070 .036 13 .056 .091 .161		.141 .096 26 .073 .266 .276	60
55							.192 .093 53 .233 .280 .315	.049 .039 54 .045 .055 .164		.120 .101 107 .055 .264 .310	55
50					.024 .007 7 .026 .032 .034		.118 .105 28 .053 .249 .319	.061 .042 36 .048 .063 .213		.080 .080 71 .047 .170 .299	50
45	.083 .030 10 .080 .117 .132				.030 .008 3 .032 .035 .037		.091 .073 15 .073 .111 .279	.093 .056 24 .089 .139 .235		.087 .059 52 .056 .132 .253	45
40	.059 .027 21 .048 .096 .119		.112 .023 3 .125 .129 .131	.116 .001 2 .116 .116 .116	.047 .007 10 .046 .081 .088	.060 .051 14 .041 .090 .193	.059 .041 13 .046 .094 .148			.061 .038 63 .047 .099 .145	40
35	.068 .034 12 .061 .091 .138		.089 .034 9 .087 .077 .144		.056 .022 14 .050 .077 .096	.054 .031 4 .043 .079 .102				.062 .030 39 .057 .090 .152	35
30	.047 .010 8 .046 .049 .069				.077 .018 12 .081 .090 .097					.065 .020 20 .064 .085 .096	30
25	.049 .014 8 .045 .066 .072	.068 .018 3 .075 .080 .083			.042 .017 8 .039 .069 .068					.050 .018 17 .046 .071 .080	25
20		.047 .015 10 .055 .060 .064	.017 1		.073 .076 7 .038 .087 .233					.055 .051 18 .041 .062 .195	20
15		.034 .013 10 .031 .037 .083			.026 .013 16 .022 .036 .054					.029 .013 26 .022 .036 .063	15
10		.026 .005 10 .026 .030 .036			.016 .007 12 .016 .021 .030					.021 .008 22 .015 .026 .035	10
5		.036 .005 6 .036 .036 .043			.016 .005 10 .016 .021 .022					.023 .011 16 .020 .036 .042	5
0											0
5											5
10			.062 1							.062 1	10
15				.004 1						.004 1	15
20				.043 .033 10 .028 .073 .114						.043 .033 10 .028 .073 .114	20
25			.088 .005 7 .088 .102 .104	.084 .018 9 .080 .071 .075						.073 .026 16 .074 .100 .103	25
30			.075 .014 8 .079 .090 .099				.054 1			.075 .015 9 .076 .089 .099	30
35			.082 .024 15 .088 .103 .122	.082 .082 5 .088 .111 .178						.082 .033 20 .078 .105 .162	35
40			.087 1							.057 1	40
45S				.079 1						.079 1	45S

LONGITUDE

TABLE XI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N							.271 .056 10 .297 .312 .321	.277 1		.271 .054 11 .291 .312 .320	70N
65							.217 .036 3 .237 .244 .247	.280 .042 15 .291 .318 .331		.269 .047 18 .278 .317 .331	65
60				.287 .044 7 .256 .324 .341			.116 .106 19 .053 .274 .294	.230 .086 13 .274 .310 .320		.182 .111 39 .226 .296 .328	60
55					.223 .082 12 .236 .315 .322	.276 .026 6 .287 .292 .294	.194 .103 27 .256 .278 .315	.136 .077 18 .136 .226 .238		.194 .096 65 .227 .285 .318	55
50				.057 .002 2 .057 .056 .059	.039 1	.136 .112 17 .064 .302 .331	.183 .106 57 .198 .306 .357	.086 .045 78 .043 .065 .226		.111 .100 156 .044 .238 .360	50
45	.097 .048 11 .074 .133 .206			.119 .026 7 .132 .138 .143	.041 .001 2 .041 .042 .042	.071 .045 35 .053 .101 .180	.064 .066 12 .064 .116 .281	.069 .033 12 .066 .096 .136		.082 .059 153 .065 .119 .273	45
40	.062 .018 34 .052 .072 .085		.083 .012 3 .062 .074 .078	.087 .040 11 .083 .107 .140	.039 .011 14 .038 .043 .066	.078 .049 46 .056 .106 .203	.068 .053 15 .045 .067 .196			.062 .041 125 .053 .077 .201	40
35	.064 .020 18 .057 .067 .105		.079 .026 26 .076 .102 .138	.081 .007 4 .089 .096 .101	.047 .023 22 .042 .069 .096	.075 .050 15 .067 .098 .187				.067 .032 85 .066 .096 .152	35
30	.061 .015 12 .058 .081 .086	.049 .007 11 .053 .057 .058	.081 .020 7 .065 .069 .101	.094 1	.063 .030 40 .061 .073 .139	.058 1				.061 .025 72 .048 .072 .123	30
25			.034 .014 6 .034 .043 .067		.053 .034 33 .043 .077 .132					.049 .032 41 .042 .073 .116	25
20		.033 .006 2 .033 .037 .038	.020 .006 3 .019 .024 .027		.058 .026 6 .060 .078 .096		.056 1			.044 .025 12 .035 .071 .094	20
15		.028 .011 9 .027 .037 .041	.026 .003 2 .026 .027 .028				.037 .004 5 .039 .039 .040			.029 .010 16 .024 .039 .041	15
10		.021 .005 12 .021 .027 .028					.037 .001 4 .037 .038 .038			.025 .008 16 .023 .036 .038	10
5		.026 .007 6 .023 .035 .038	.003 .002 2 .003 .004 .004		.030 .007 2 .030 .035 .037		.034 .005 2 .034 .037 .039			.024 .011 14 .022 .037 .039	5
0			.015 .004 5 .013 .019 .020		.041 .011 17 .038 .048 .071					.035 .015 22 .036 .045 .069	0
5			.026 .008 4 .027 .029 .030	.047 .037 11 .046 .067 .130	.052 .026 8 .050 .071 .089					.044 .032 20 .029 .065 .124	5
10			.056 .026 7 .045 .092 .096	.037 .026 14 .036 .061 .093			.024 .004 4 .024 .027 .029			.041 .027 25 .032 .069 .099	10
15			.087 .031 13 .065 .101 .111	.056 .030 4 .044 .079 .108	.032 .011 13 .030 .045 .048		.041 .024 5 .041 .057 .078			.049 .029 35 .041 .068 .111	15
20			.060 .023 10 .056 .076 .082	.038 .001 6 .038 .038 .040			.066 .020 4 .067 .080 .091			.054 .022 20 .039 .075 .089	20
25			.106 1	.089 .017 14 .087 .077 .084			.062 .028 5 .071 .088 .097			.062 .023 20 .061 .083 .104	25
30				.117 .049 17 .110 .159 .229			.078 .012 3 .070 .086 .093			.112 .048 20 .108 .134 .226	30
35			.084 .002 2 .084 .085 .085	.135 .081 30 .087 .238 .311			.050 1			.128 .080 33 .095 .222 .305	35
40				.131 .106 4 .141 .235 .241						.131 .106 4 .141 .235 .241	40
45S				.089 .002 2 .089 .070 .071						.089 .002 2 .089 .070 .071	45S

LONGITUDE

TABLE XI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.260 .051 13 .257 .312 .321	.270 .046 10 .266 .319 .331			.264 .049 23 .266 .315 .328	70N
65					.219 .041 20 .217 .283 .282	.243 .047 21 .240 .283 .310				.232 .046 41 .223 .283 .307	65
60				.329 1	.172 .055 6 .191 .224 .235	.185 .084 66 .202 .261 .341	.235 .026 11 .229 .259 .283	.271 .039 7 .256 .307 .342		.198 .080 93 .215 .266 .347	60
55				.181 .061 26 .184 .251 .302	.208 .019 7 .209 .225 .231	.196 .090 65 .219 .271 .358	.146 .113 53 .107 .277 .371	.126 .076 56 .127 .198 .308		.163 .094 206 .102 .254 .366	55
50				.131 .086 38 .111 .237 .338	.092 .070 15 .066 .091 .266	.159 .088 62 .165 .244 .356	.145 .099 96 .123 .258 .339	.072 .061 78 .051 .127 .277		.124 .091 289 .096 .236 .339	50
45	.059 .054 23 .050 .064 .212		.265 .023 2 .265 .280 .286	.121 .091 34 .093 .162 .345	.023 .006 8 .025 .029 .030	.174 .089 65 .189 .266 .337	.086 .057 63 .068 .154 .199	.051 .031 7 .044 .089 .090		.115 .088 202 .087 .222 .327	45
40	.080 .035 62 .078 .122 .138		.132 .091 24 .094 .212 .346	.093 .064 23 .067 .139 .283	.072 .106 18 .030 .085 .355	.070 .082 67 .038 .083 .299	.082 .031 6 .050 .080 .120			.083 .074 196 .044 .125 .309	40
35	.083 .025 23 .083 .112 .128		.063 .041 9 .092 .114 .149	.030 .008 12 .030 .037 .046	.044 .030 89 .036 .053 .166	.046 .020 15 .041 .057 .094				.053 .033 128 .038 .084 .142	35
30	.033 .011 19 .032 .045 .055			.048 .019 20 .047 .064 .086	.043 .024 130 .036 .061 .113					.042 .023 169 .036 .060 .108	30
25	.056 .009 2 .056 .064 .067			.039 .011 18 .037 .047 .065	.037 .018 110 .031 .058 .080					.037 .018 130 .032 .057 .079	25
20		.032 .008 2 .032 .037 .039	.021 1	.040 1	.049 .057 22 .037 .063 .202					.046 .053 26 .033 .056 .164	20
15					.038 .014 8 .042 .052 .052					.038 .014 8 .042 .052 .052	15
10					.053 .008 4 .051 .059 .065					.053 .008 4 .051 .059 .065	10
5			.032 .003 2 .032 .034 .035		.041 .012 8 .046 .049 .049		.021 .004 5 .023 .024 .024			.032 .012 13 .029 .048 .049	5
0			.045 .018 9 .038 .068 .071	.022 .011 18 .017 .038 .043	.019 .010 3 .012 .026 .032		.024 .003 5 .022 .027 .029			.028 .016 36 .021 .041 .066	0
5			.051 .018 12 .052 .071 .082	.024 .013 18 .024 .040 .047			.016 .001 4 .016 .017 .018			.033 .020 34 .026 .053 .077	5
10			.088 .025 11 .056 .095 .100	.031 .011 15 .032 .039 .062			.013 1			.045 .026 27 .038 .064 .098	10
15			.062 .018 13 .061 .074 .100	.029 .022 7 .021 .027 .076	.052 1					.051 .024 21 .051 .072 .097	15
20			.078 .029 12 .066 .118 .127	.054 .044 6 .027 .088 .131			.100 1			.071 .035 18 .056 .118 .134	20
25			.080 .032 7 .068 .112 .128	.102 .013 14 .104 .111 .118						.094 .024 21 .102 .111 .126	25
30			.091 .014 7 .086 .107 .112	.091 .029 39 .098 .122 .138						.081 .027 46 .086 .120 .137	30
35			.187 .008 2 .187 .192 .194	.100 .029 28 .103 .137 .148						.107 .035 28 .104 .142 .186	35
40			.088 .028 2 .088 .108 .114							.088 .028 2 .088 .108 .114	40
45S			.065 .005 8 .067 .068 .072							.065 .005 8 .064 .068 .072	45S

LONGITUDE

TABLE XI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.249 .261 .108 .354 45 .426					.249 .261 .108 .354 45 .426
60				.199 .168 .064 .249 10 .316	.227 .228 .079 .308 51 .416	.199 .202 .097 .309 29 .370		.408 .418 .043 .439 5 .460		.224 .213 .094 .315 95 .429
55				.235 .246 .088 .336 50 .358	.221 .250 .095 .304 17 .353	.251 .266 .109 .353 29 .483	.224 .196 .146 .377 30 .526	.120 .107 .079 .189 65 .292		.196 .169 .118 .312 191 .445
50				.185 .179 .085 .277 58 .339	.194 .188 .084 .285 33 .382	.324 .307 .094 .398 19 .505	.134 .123 .109 .252 71 .399	.067 .045 .058 .112 94 .179		.143 .119 .110 .265 285 .403
45	.105 .063 .099 .242 36 .320		.096 .087 .017 .111 4 .118	.120 .110 .077 .181 62 .326	.076 .063 .066 .119 72 .260	.112 .090 .066 .191 154 .273	.126 .080 .103 .263 79 .351	.145 .098 .133 .252 30 .444		.111 .076 .085 .207 437 .327
40	.098 .080 .069 .135 43 .331		.077 .066 .061 .102 32 .209	.100 .078 .067 .174 36 .259	.063 .041 .040 .112 33 .184	.070 .044 .064 .114 104 .290	.126 .111 .070 .185 13 .286	.086 .083 .028 .113 14 .142		.082 .063 .063 .131 275 .308
35	.160 .172 .031 .183 13 .196		.043 .043 .033 .063 19 .124	.070 .063 .033 .095 18 .185	.046 .044 .019 .063 93 .088	.191 .127 .089 .209 39 .336	.031 .032 .009 .040 20 .045			.070 .044 .061 .126 202 .223
30	.082 .072 .031 .109 9 .138	.089 .084 .019 .094 8 .100	.023 .016 .013 .040 6 .046		.048 .045 .021 .067 99 .080	.067 .060 .016 .080 3 .088	.029 .037 .015 .042 15 .044			.048 .043 .026 .069 140 .104
25	.053 .060 .019 .068 3 .072	.084 .087 .020 .104 19 .117	.017 .018 .004 .019 7 .021		.051 .051 .031 .078 99 .122		.027 .030 .009 .033 22 .042			.060 .043 .031 .076 146 .119
20		.089 .067 .029 .098 9 .120	.037 .037 .004 .040 4 .043		.048 .036 .033 .085 15 .101		.027 .027 .013 .038 19 .048			.042 .036 .029 .074 47 .106
15		.041 .041 .000 .041 8 .041	.039 .038 .008 .046 6 .062		.025 .022 .013 .034 6 .049		.037 .023 .028 .059 14 .093			.036 .037 .021 .051 31 .092
10				.017 .017 .002 .018 2 .018	.026 .024 .008 .032 12 .043		.042 .049 .025 .065 14 .075			.033 .022 .020 .054 28 .075
5			.002 1	.029 .027 .004 .034 6 .036	.031 .037 .015 .046 10 .048		.049 .045 .030 .065 12 .086			.037 .026 .024 .069 26 .087
0				.033 .035 .006 .037 5 .038	.043 .047 .010 .052 7 .056		.050 .043 .030 .065 6 .089			.042 .032 .020 .058 18 .087
5				.016 .016 .001 .017 3 .018	.047 .048 .005 .051 6 .053		.023 .025 .007 .029 6 .031			.031 .028 .014 .049 15 .052
10					.046 .045 .003 .048 5 .050		.020 1			.041 .044 .010 .048 6 .050
15					.052 1					.052 1
20			.028 .024 .011 .035 4 .041	.082 .082 .015 .092 2 .096			.046 .037 .022 .063 4 .080			.045 .033 .027 .076 10 .094
25			.036 .016 .036 .056 5 .099	.092 .086 .014 .107 9 .119						.072 .063 .036 .104 14 .118
30			.076 .080 .017 .088 6 .097	.083 .083 .017 .094 2 .096						.078 .080 .017 .096 8 .099
35			.165 .168 .018 .186 28 .183							.165 .168 .018 .186 28 .193
40			.257 .265 .017 .268 4 .271							.257 .265 .017 .268 4 .271
45S			.182 .182 .015 .192 2 .196	.291 .279 .061 .360 11 .381						.274 .264 .069 .346 13 .391

LONGITUDE —

TABLE XI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65				.308 .084 10 .280 .409 .478	.279 .101 104 .266 .355 .515	.164 .026 2 .164 .181 .188				.280 .101 116 .265 .355 .513	65
60				.357 .114 51 .388 .465 .521	.348 .133 58 .387 .510 .579	.355 .079 9 .336 .420 .509				.353 .122 118 .318 .496 .565	60
55				.337 .106 91 .344 .458 .503	.303 .084 25 .311 .384 .445	.316 .136 18 .323 .490 .529	.286 .099 10 .257 .388 .478	.152 .137 23 .080 .326 .418		.302 .127 167 .309 .441 .524	55
50				.173 .087 29 .160 .256 .366	.240 .107 44 .210 .353 .486	.241 .101 16 .236 .262 .486	.141 .092 27 .137 .242 .273	.069 .071 18 .048 .062 .272		.183 .112 134 .153 .276 .481	50
45	.319 .124 12 .290 .504 .528			.191 .114 48 .142 .330 .388	.193 .120 22 .197 .328 .376	.281 .153 16 .316 .433 .496	.166 .093 17 .103 .279 .313	.012 1		.213 .131 118 .123 .347 .506	45
40	.102 .033 9 .093 .110 .168		.056 1	.102 .047 37 .090 .157 .220	.085 .014 8 .087 .078 .079	.119 .085 191 .100 .189 .381	.063 .051 8 .047 .048 .175			.112 .078 254 .088 .178 .346	40
35	.146 .085 5 .119 .194 .295		.048 .011 8 .045 .047 .072	.068 .004 7 .068 .069 .076	.055 .021 29 .055 .079 .088	.191 .143 113 .159 .406 .445	.022 .012 7 .015 .032 .047			.148 .135 169 .086 .351 .441	35
30	.091 .044 10 .086 .131 .169	.088 1	.053 .009 4 .067 .059 .069	.040 .008 19 .040 .050 .063	.064 .017 48 .060 .085 .099	.066 .011 4 .062 .073 .083	.076 .019 8 .072 .096 .108			.062 .025 92 .053 .086 .127	30
25	.055 .022 17 .055 .076 .088	.068 .008 3 .065 .078 .079		.041 .011 17 .043 .051 .062	.055 .022 61 .059 .072 .102		.020 .005 4 .018 .024 .028			.052 .021 102 .061 .072 .092	25
20		.064 .013 20 .064 .078 .086	.032 .008 8 .029 .039 .044		.085 .043 18 .076 .122 .191		.026 .003 12 .026 .029 .031			.060 .035 55 .054 .082 .151	20
15			.033 .010 4 .031 .042 .047		.045 .024 14 .034 .072 .092		.038 .014 17 .039 .047 .087			.040 .019 35 .037 .053 .089	15
10			.025 .011 4 .030 .033 .034		.021 1		.047 .014 26 .043 .065 .076			.044 .016 31 .041 .063 .076	10
5			.023 .006 3 .021 .026 .031				.064 .014 19 .067 .077 .092			.059 .020 22 .062 .076 .091	5
0							.075 .019 21 .075 .093 .106			.075 .019 21 .075 .093 .106	0
5							.063 .018 16 .068 .079 .088			.063 .018 16 .068 .079 .088	5
10							.054 .016 26 .056 .068 .081			.054 .016 26 .056 .068 .081	10
15				.060 .028 10 .043 .081 .102			.052 .013 26 .056 .064 .073			.062 .019 36 .054 .066 .096	15
20				.086 1			.047 .013 13 .046 .059 .071			.050 .016 14 .048 .065 .082	20
25							.068 .012 4 .067 .078 .085			.068 .012 4 .067 .078 .085	25
30				.028 1			.148 .043 5 .136 .192 .209			.128 .060 6 .127 .186 .208	30
35				.155 .014 4 .156 .167 .173						.156 .014 4 .156 .167 .173	35
40			.196 .045 6 .210 .226 .234							.196 .045 6 .210 .226 .234	40
45S				.231 .024 2 .231 .247 .254						.231 .024 2 .231 .247 .254	45S

LONGITUDE

TABLE XI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65					.388 .091 13 .426 .482 .496	.136 1				.378 .111 14 .424 .480 .496	65
60				.395 .121 27 .365 .514 .580	.304 .192 40 .232 .544 .653	.309 .146 38 .257 .479 .606				.329 .165 108 .306 .532 .647	60
55				.408 .116 66 .360 .524 .632	.528 .090 11 .521 .627 .666	.362 .106 33 .337 .504 .542	.290 .069 7 .319 .348 .357			.398 .120 117 .385 .531 .652	55
50				.340 .137 86 .344 .493 .603	.192 .116 32 .191 .238 .552	.203 .117 40 .187 .364 .448	.317 .089 9 .373 .384 .398	.118 .049 10 .080 .158 .217		.269 .145 179 .234 .424 .589	50
45			.211 .124 7 .161 .367 .412	.259 .105 38 .236 .379 .480	.162 .142 49 .112 .268 .596	.246 .152 64 .171 .430 .578	.046 .075 21 .013 .096 .251	.040 .014 7 .032 .054 .064		.195 .149 186 .093 .365 .572	45
40	.081 .029 17 .072 .092 .159		.146 .097 38 .118 .249 .382	.339 .170 18 .333 .495 .621	.102 .121 66 .050 .196 .410	.133 .104 43 .089 .280 .374				.143 .133 179 .089 .270 .521	40
35	.110 .050 13 .106 .144 .213		.064 .032 19 .054 .081 .144	.091 .022 10 .072 .093 .132	.040 .020 4 .036 .060 .068	.031 1				.078 .042 47 .069 .107 .206	35
30	.034 .010 12 .032 .043 .052		.044 .012 10 .042 .058 .063		.072 .008 6 .073 .079 .084		.024 1			.045 .018 29 .040 .064 .080	30
25	.050 .022 11 .053 .072 .080	.080 .018 8 .055 .063 .067	.059 .006 4 .059 .065 .066		.066 .006 2 .066 .069 .071		.032 .007 8 .030 .039 .042			.049 .019 27 .053 .068 .079	25
20		.053 .009 15 .056 .060 .065	.009 1				.054 .019 8 .051 .079 .084			.051 .016 24 .052 .061 .083	20
15							.106 .011 6 .104 .111 .127			.106 .011 6 .104 .111 .127	15
10							.065 .020 2 .065 .078 .083			.065 .020 2 .065 .078 .083	10
5		.013 1	.011 1				.062 .012 7 .063 .074 .075			.051 .023 9 .063 .072 .075	5
0							.077 .019 12 .070 .101 .108			.077 .019 12 .070 .101 .108	0
5							.074 .017 18 .073 .093 .101			.074 .017 18 .073 .093 .101	5
10							.069 .013 17 .055 .072 .081			.069 .013 17 .055 .072 .081	10
15							.054 .015 16 .051 .070 .079			.054 .015 16 .051 .070 .079	15
20							.065 .016 15 .065 .082 .096			.065 .016 15 .065 .082 .096	20
25											25
30											30
35											35
40											40
45S											45S

LONGITUDE

TABLE XI. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60				.291 1						.291 1	60
55				.675 1		.373 .017 5 .372 .366 .397				.424 .113 6 .375 .454 .647	55
50				.507 .208 18 .426 .680 .940		.321 .132 23 .314 .481 .523	.138 .091 15 .169 .211 .297			.332 .208 56 .296 .505 .859	50
45			.274 .132 21 .287 .364 .570	.431 .162 36 .403 .563 .868		.264 .166 54 .206 .518 .636	.218 .088 26 .249 .307 .328			.308 .167 137 .289 .516 .652	45
40			.251 .174 68 .200 .448 .649		.025 .002 6 .025 .027 .029	.327 .083 8 .315 .392 .464	.232 .128 9 .212 .308 .482			.241 .109 91 .206 .433 .641	40
35			.106 .068 4 .091 .161 .186		.037 .002 2 .037 .038 .039		.079 .036 22 .080 .119 .144			.080 .041 28 .080 .126 .168	35
30							.050 .014 20 .052 .061 .076			.050 .014 20 .052 .061 .076	30
25	.045 .019 8 .036 .060 .080	.057 1					.047 .013 16 .044 .061 .067			.046 .015 28 .042 .060 .076	25
20		.043 .001 2 .043 .044 .044	.010 .002 2 .010 .011 .011				.041 .012 7 .044 .053 .054			.035 .015 11 .041 .051 .054	20
15			.010 .009 6 .008 .015 .026				.040 .009 2 .040 .046 .049			.017 .016 8 .009 .031 .046	15
10			.002 .002 7 0.000 .003 .006							.002 .002 7 0.000 .003 .006	10
5		.037 .030 2 .037 .057 .066	.002 .002 2 .002 .003 .003							.019 .028 4 .005 .038 .063	5
0											0
5											5
10											10
15											15
20											20
25											25
30											30
35											35
40											40
45S											45S

LONGITUDE

TABLE XII. - GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60								.084 .086 .031 .127 7 .139		.084 .086 .031 .127 7 .139
55								.071 .083 .034 .116 8 .127		.071 .083 .034 .116 8 .127
50	.062 .044 .036 .115 18 .132					.176 .176 .029 .186 2 .203	.035 .034 .010 .047 7 .048	.088 .085 .055 .141 16 .206		.080 .080 .058 .146 24 .209
45	.042 .037 .019 .058 36 .079					.033 .032 .003 .036 8 .039	.096 .064 .081 .221 43 .274	.083 .086 .023 .116 16 .142		.085 .086 .066 .117 82 .200
40	.043 .044 .014 .056 10 .064		.062 1		.037 1	.087 .062 .022 .070 10 .108	.070 .057 .037 .130 12 .134			.050 .044 .027 .065 59 .132
35	.038 .039 .006 .043 6 .044	.056 .056 .007 .062 12 .064			.048 .036 .027 .070 3 .085	.053 .047 .025 .078 11 .093				.049 .045 .021 .073 25 .091
30	.030 .030 .001 .032 4 .032	.030 .030 .003 .031 2 .032			.066 1					.050 .054 .011 .060 19 .064
25			.055 .059 .021 .071 4 .081	.055 .052 .027 .073 7 .118	.064 1					.035 .031 .012 .033 7 .060
20		.026 .029 .008 .030 3 .031	.038 .036 .025 .061 6 .078		.055 .056 .008 .061 9 .068					.059 .061 .020 .071 20 .109
15		.037 .038 .010 .060 6 .062			.032 1					.034 .018 .020 .051 10 .073
10										.037 .035 .010 .060 6 .052
5										
0										
5										
10										
15				.063 1	.029 .028 .008 .033 2 .035					.037 .036 .012 .047 3 .052
20										
25			.044 .061 .013 .064 6 .067							.044 .051 .013 .054 6 .057
30			.021 .021 .006 .024 2 .026							.021 .021 .006 .024 2 .026
35			.032 .032 .003 .034 2 .036	.088 .107 .039 .118 3 .124						.066 .038 .041 .113 5 .124
40			.022 1	.027 1						.025 .025 .003 .026 2 .027
45S										

LONGITUDE

TABLE XII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60								.183 .186 .011 .192 4 .195		.183 .186 .011 .192 4 .195
55				.048 .060 .027 .074 4 .076			.205 .209 .043 .237 6 .273	.127 .091 .081 .219 42 .264		.130 .095 .082 .225 52 .275
50				.084 .088 .041 .123 13 .182	.075 1		.119 .066 .089 .237 14 .265	.060 .045 .029 .092 13 .112		.088 .068 .064 .132 41 .261
45	.035 .031 .014 .044 15 .072			.111 .060 .083 .216 23 .281	.074 .074 .009 .080 2 .083	.056 .034 .066 .037 8 .203	.110 .091 .064 .194 20 .226	.096 .094 .055 .127 13 .209		.088 .057 .070 .157 81 .274
40	.043 .050 .010 .051 7 .052		.059 .052 .021 .063 12 .112	.110 .113 .042 .149 9 .169	.035 .033 .011 .045 13 .053	.091 .055 .070 .167 80 .267	.075 .059 .043 .117 17 .163			.076 .039 .057 .124 106 .253
35	.044 .043 .019 .051 10 .086		.078 .077 .021 .100 9 .109		.045 .038 .033 .060 37 .128	.068 .059 .044 .069 23 .198	.037 .034 .008 .046 13 .052			.053 .035 .034 .070 92 .136
30	.039 .042 .008 .046 9 .047				.055 .045 .037 .082 35 .155		.039 .040 .002 .041 3 .041	.022 .019 .009 .033 9 .037		.047 .038 .033 .060 52 .132
25	.050 .046 .031 .066 6 .106		.045 .046 .004 .047 5 .048		.045 .042 .017 .051 30 .094					.046 .043 .019 .052 41 .111
20			.031 .031 .011 .040 18 .084	.049 .053 .009 .056 18 .069	.047 .048 .018 .067 20 .083					.042 .030 .016 .056 54 .080
15		.058 1	.024 .022 .008 .030 11 .041		.028 .026 .007 .031 11 .041					.027 .025 .010 .036 23 .051
10				.024 .024 .005 .027 2 .028	.030 .029 .007 .037 6 .041					.028 .025 .007 .035 8 .041
5				.028 .031 .008 .033 5 .034						.028 .031 .008 .033 5 .034
0				.023 .024 .003 .026 3 .026						.023 .024 .003 .025 3 .026
5		.006 1		.026 .026 .003 .026 5 .032						.023 .025 .007 .027 6 .031
10		.014 .015 .001 .015 4 .018		.025 .025 .002 .027 5 .028						.020 .023 .006 .026 9 .028
15		.013 .011 .004 .016 3 .018		.029 .032 .009 .036 4 .039						.022 .018 .011 .036 7 .039
20			.009 1	.048 .048 .001 .049 2 .049						.035 .047 .018 .048 3 .049
25			.031 .031 .010 .038 2 .041							.031 .031 .010 .038 2 .041
30										
35				.078 .072 .022 .105 5 .109						.078 .072 .022 .105 6 .109
40				.041 .039 .019 .057 3 .065						.041 .039 .019 .057 3 .065
45S				.044 .043 .010 .053 4 .058						.044 .043 .010 .053 4 .058

LONGITUDE

TABLE XII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N							.215 .214 .022 .233 3 .241			.215 .214 .022 .233 3 .241	70N
65					.312 1		.092 .106 .038 .129 5 .132	.159 .142 .054 .227 12 .249		.149 .121 .069 .227 18 .291	65
60						.236 .242 .043 .260 20 .291	.224 .230 .095 .297 41 .456	.312 1		.229 .225 .082 .291 62 .414	60
55				.190 1		.226 .229 .045 .274 14 .287	.119 .061 .093 .247 35 .315	.167 .186 .099 .274 60 .349		.160 .108 .097 .269 110 .345	55
50				.206 .210 .037 .235 7 .254	.181 1	.269 .296 .051 .313 15 .347	.276 .298 .105 .377 20 .428	.125 .107 .076 .196 46 .321		.190 .188 .105 .307 89 .408	50
45	.044 .049 .013 .056 11 .069			.055 .056 .007 .062 11 .066	.046 .034 .027 .056 13 .112	.109 .083 .066 .156 33 .287	.112 .067 .086 .205 50 .317	.119 .089 .072 .216 9 .234		.094 .062 .073 .160 127 .297	45
40	.077 .077 .024 .092 2 .099		.134 .126 .059 .188 6 .218	.126 .102 .058 .196 24 .226	.042 .034 .023 .049 8 .087	.062 .062 .065 .109 69 .321	.044 .038 .014 .054 14 .101			.087 .064 .064 .134 121 .227	40
35	.030 .031 .008 .035 7 .046		.075 .051 .050 .117 21 .198	.047 .041 .011 .055 3 .061	.054 .047 .031 .066 40 .129	.065 .060 .027 .079 22 .139				.059 .048 .036 .079 93 .173	35
30	.039 .026 .031 .047 6 .099	.022 .022 .002 .024 3 .026			.064 .055 .034 .106 40 .139	.050 1				.058 .048 .034 .103 50 .135	30
25	.072 1	.028 .024 .016 .029 10 .065	.045 .058 .020 .062 5 .066		.056 .044 .027 .082 35 .124					.050 .041 .027 .073 51 .123	25
20		.039 .024 .027 .060 3 .075	.063 .065 .032 .094 7 .098	.075 .074 .015 .090 24 .105	.041 .037 .011 .055 11 .058					.062 .062 .024 .089 45 .102	20
15		.040 1	.032 .031 .015 .044 23 .069	.080 .079 .011 .091 12 .096						.048 .031 .027 .077 36 .097	15
10											10
5		.033 .033 .001 .034 7 .036			.032 1					.033 .033 .001 .034 8 .035	5
0		.028 .027 .010 .039 6 .041								.028 .027 .010 .039 6 .041	0
5		.007 .007 .003 .010 4 .011		.021 .021 .001 .022 4 .023						.014 .012 .007 .021 8 .023	5
10				.027 .020 .012 .043 9 .048						.027 .020 .012 .043 9 .048	10
15				.024 .021 .010 .033 3 .037	.034 .033 .018 .066 13 .087					.032 .027 .016 .052 16 .057	15
20				.072 .072 .006 .076 5 .079						.072 .072 .006 .076 5 .079	20
25				.070 .079 .025 .096 16 .098						.070 .079 .025 .096 16 .098	25
30				.102 .097 .032 .123 37 .193						.102 .097 .032 .123 37 .193	30
35			.056 1	.104 .096 .044 .137 12 .198						.101 .095 .044 .126 13 .198	35
40			.048 1							.048 1	40
45S											45S

LONGITUDE

AD-A141 351 TABULATIONS OF AMBIENT OZONE DATA OBTAINED BY GASP (GLOBAL AIR SAMPLING P..(U) NATIONAL AERONAUTICS AND SPACE ADMINISTRATION CLEVELAND OH LE.. 2/2

UNCLASSIFIED W H JASPERSON ET AL. JAN 84 NASA-TM-82742 F/G 4/1 NL

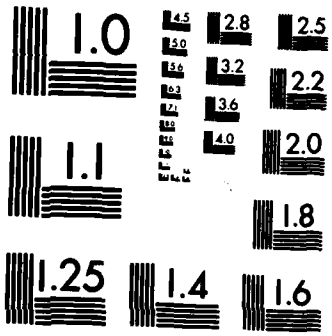


TABLE XII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.299 .064 8 .295 .361 .385	.285 .067 23 .290 .347 .406			.289 .064 31 .290 .357 .406
65					.288 .035 18 .252 .280 .336	.163 .007 2 .163 .166 .170	.193 1			.244 .046 18 .243 .273 .335
60				.146 1	.202 .075 10 .214 .264 .296	.160 .082 32 .126 .280 .302				.169 .081 43 .146 .261 .301
55				.077 .045 15 .071 .099 .186	.185 .053 28 .189 .239 .275	.175 .093 54 .172 .282 .337	.252 .123 16 .289 .365 .431	.170 .063 9 .193 .217 .256		.175 .095 122 .127 .269 .381
50				.054 .031 9 .063 .085 .104	.144 .102 34 .105 .202 .276	.187 .113 44 .189 .314 .379	.176 .130 31 .137 .353 .380	.136 .079 46 .112 .217 .283		.155 .108 164 .084 .293 .376
45	.103 .054 42 .097 .160 .236			.110 .059 22 .102 .132 .267	.145 .089 59 .116 .251 .336	.233 .102 140 .239 .335 .396	.144 .109 65 .102 .276 .360	.108 .094 23 .054 .247 .279		.170 .108 351 .156 .298 .382
40	.093 .051 64 .071 .141 .217		.115 .095 13 .065 .189 .327	.176 .101 24 .202 .289 .334	.088 .080 88 .062 .154 .328	.090 .060 248 .066 .149 .244	.183 .184 19 .074 .402 .495			.099 .080 456 .058 .163 .355
35	.081 .053 38 .068 .106 .262		.075 .056 5 .052 .102 .179	.062 .031 21 .049 .105 .126	.079 .056 189 .065 .136 .244	.100 .064 67 .085 .143 .241				.082 .056 310 .059 .133 .249
30	.064 .028 51 .060 .089 .132	.096 .030 4 .081 .116 .144	.049 .004 3 .050 .052 .083		.063 .041 232 .051 .087 .220	.066 .006 7 .064 .066 .078				.064 .038 297 .053 .087 .215
25		.071 .015 13 .070 .077 .104	.069 1		.051 .022 219 .045 .069 .113					.052 .022 233 .047 .071 .112
20		.065 1	.018 .002 6 .018 .019 .021	.065 .019 21 .061 .064 .103	.044 .019 68 .039 .064 .089					.047 .022 86 .040 .069 .096
15		.033 .004 3 .031 .036 .039	.049 .017 5 .047 .066 .070	.064 .020 23 .055 .074 .083	.049 .015 18 .045 .065 .078					.050 .018 49 .046 .071 .034
10		.045 .004 5 .045 .048 .050			.037 .012 8 .034 .051 .053					.040 .010 13 .045 .050 .053
5		.035 .008 7 .034 .042 .047			.019 .004 4 .019 .022 .026					.029 .010 11 .027 .040 .047
0		.034 .003 7 .035 .036 .038		.021 .000 3 .021 .022 .022	.024 .008 2 .024 .029 .031					.029 .007 12 .031 .036 .038
5		.019 .006 5 .017 .023 .026		.024 .004 3 .025 .027 .028						.021 .006 8 .017 .026 .029
10		.021 .008 4 .018 .027 .034		.026 .009 6 .027 .034 .043						.025 .009 10 .021 .034 .042
15		.046 .004 6 .045 .049 .052			.041 .017 2 .041 .053 .057					.045 .009 8 .045 .052 .057
20				.044 .014 9 .042 .047 .074						.044 .014 9 .042 .047 .074
25				.073 .025 20 .062 .095 .101	.019 1					.071 .027 21 .078 .095 .101
30				.064 .029 29 .073 .064 .119	.023 1					.062 .030 30 .073 .083 .116
35			.049 .012 18 .054 .060 .061	.077 .038 12 .081 .114 .139						.060 .029 30 .048 .087 .135
40			.063 1							.063 1
45S										

LONGITUDE

TABLE XII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.204 .174 .069 .288 18 .288	.269 .267 .080 .383 20 .383				.237 .199 .082 .312 38 .380
60				.211 .240 .162 .383 18 .416	.159 .140 .082 .252 46 .382	.249 .302 .117 .392 33 .396				.198 .181 .122 .349 99 .400
55				.224 .230 .130 .309 86 .513	.173 .164 .071 .206 40 .415	.276 .238 .156 .444 18 .841	.317 .324 .069 .390 17 .410	.317 .354 .128 .430 17 .464		.238 .221 .125 .387 147 .802
50				.358 .299 .183 .536 35 .882	.139 .109 .065 .266 33 .315	.213 .213 .152 .316 2 .356	.280 .294 .101 .407 22 .458	.234 .286 .160 .409 36 .515		.282 .159 .156 .409 128 .984
45				.155 .144 .095 .297 61 .969	.132 .148 .101 .216 33 .329	.165 .179 .100 .273 26 .340	.202 .097 .186 .479 36 .981	.171 .149 .120 .300 75 .423		.166 .094 .125 .290 234 .483
40	.117 .107 .026 .139 13 .165		.102 .103 .056 .186 9 .196	.152 .159 .084 .243 36 .283	.088 .088 .062 .163 81 .220	.135 .100 .104 .206 574 .447	.282 .255 .142 .397 4 .492	.219 .281 .109 .331 18 .368		.125 .103 .101 .205 733 .431
35	.102 .082 .038 .132 3 .182		.058 .045 .031 .067 24 .126	.132 .121 .038 .157 24 .234	.090 .082 .067 .156 293 .270	.151 .150 .084 .227 114 .243				.105 .069 .070 .192 458 .246
30	.148 .191 .065 .205 7 .219	.118 .093 .088 .203 7 .206	.054 .041 .035 .097 42 .127	.115 .115 .002 .116 3 .117	.073 .088 .054 .101 222 .243					.073 .080 .054 .109 261 .210
25	.044 .032 .029 .079 10 .096	.067 .071 .027 .084 12 .114	.038 .046 .017 .056 27 .061	.043 .041 .011 .059 30 .064	.088 .087 .033 .098 186 .145					.061 .059 .032 .092 267 .144
20		.047 .052 .020 .071 17 .080	.039 .036 .006 .041 7 .052	.083 .083 .016 .077 24 .089	.053 .040 .027 .086 38 .120					.054 .048 .023 .077 86 .106
15		.065 .064 .001 .065 3 .066	.034 .030 .016 .050 13 .063	.044 .042 .007 .049 11 .068	.032 .031 .010 .040 40 .067					.036 .033 .013 .049 67 .065
10				.028 1	.029 .031 .007 .034 43 .044					.029 .031 .007 .034 44 .044
5		.026 1		.030 .031 .007 .036 12 .040	.029 .029 .008 .032 34 .039					.029 .029 .006 .034 47 .040
0				.024 .025 .006 .026 13 .033	.029 .028 .008 .036 27 .039					.027 .026 .007 .033 40 .039
5				.022 .023 .007 .027 12 .028	.032 .033 .007 .040 28 .040					.029 .026 .008 .039 40 .040
10				.031 .027 .011 .043 29 .061	.031 .033 .009 .037 14 .060					.031 .026 .011 .041 43 .051
15				.041 .036 .014 .064 34 .072	.023 .021 .002 .024 3 .026					.039 .037 .015 .053 37 .071
20				.061 .048 .025 .087 28 .120	.020 .020 .008 .021 7 .029					.044 .044 .026 .057 33 .116
25				.061 .056 .022 .083 11 .106	.014 .013 .003 .017 7 .018					.043 .043 .029 .066 18 .104
30				.118 .121 .014 .126 4 .128						.116 .121 .014 .126 4 .129
35			.149 .154 .007 .154 3 .154	.193 .101 .112 .337 15 .360						.177 .124 .103 .329 18 .359
40			.042 .036 .016 .058 6 .067							.042 .036 .016 .058 6 .067
45S			.129 .136 .032 .154 6 .154							.129 .136 .032 .154 6 .154

LONGITUDE

TABLE XII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65				.179 1	.286 .149 86 .241 .461 .540					.284 .149 57 .217 .460 .540	65
60				.418 .151 92 .436 .587 .632	.290 .130 68 .281 .422 .569	.121 .024 11 .121 .133 .179	.277 .075 12 .262 .333 .427	.282 .156 32 .286 .450 .517		.315 .156 173 .303 .485 .607	60
55				.283 .169 93 .246 .484 .702	.307 .142 17 .269 .488 .544	.279 .105 4 .230 .361 .444	.267 .162 41 .255 .438 .653	.216 .145 40 .193 .385 .480		.268 .172 195 .236 .450 .674	55
50				.297 .116 80 .287 .393 .656	.213 .136 34 .196 .339 .470	.234 .031 3 .216 .287 .276	.390 .103 10 .393 .601 .643	.125 .063 12 .126 .186 .224		.267 .132 139 .264 .369 .550	50
45	.182 .035 6 .173 .210 .243		.219 .086 7 .162 .333 .359	.243 .145 101 .242 .393 .489	.121 .107 59 .106 .210 .360	.217 .151 124 .184 .363 .570	.489 1			.207 .146 298 .132 .358 .518	45
40			.207 .115 21 .170 .313 .492	.147 .102 40 .113 .241 .381	.122 .096 58 .096 .229 .380	.148 .091 327 .132 .256 .332	.113 1	.210 .158 24 .259 .375 .425		.150 .101 471 .132 .261 .403	40
35	.192 1		.187 .100 23 .172 .267 .393	.126 .059 17 .100 .192 .239	.091 .046 149 .080 .126 .218	.161 .136 83 .126 .247 .846		.001 1		.123 .096 274 .086 .181 .450	35
30			.095 .044 16 .069 .151 .177	.054 .027 9 .036 .090 .102	.079 .042 173 .067 .104 .227			.031 1		.079 .042 199 .066 .106 .220	30
25	.025 .024 10 .023 .031 .080	.015 1	.050 .012 4 .052 .059 .064	.024 .008 3 .028 .029 .030	.063 .029 108 .060 .080 .126					.059 .030 126 .056 .089 .125	25
20		.025 .008 9 .025 .034 .036	.041 .012 5 .046 .046 .052		.059 .021 26 .059 .082 .092					.049 .023 41 .047 .072 .091	20
15			.044 .016 4 .039 .056 .066		.036 .015 33 .033 .047 .075					.037 .015 37 .033 .047 .074	15
10			.027 .005 7 .026 .028 .037		.029 .008 44 .030 .036 .047					.028 .007 51 .028 .036 .046	10
5		.015 .009 5 .014 .024 .026	.028 .004 2 .028 .030 .031		.028 .008 64 .027 .036 .042					.027 .009 71 .027 .034 .042	5
0				.036 .011 9 .036 .048 .061	.028 .008 52 .028 .035 .044					.029 .009 60 .029 .037 .048	0
5				.038 .010 9 .037 .047 .056	.027 .006 35 .027 .031 .044					.029 .008 44 .027 .036 .051	5
10				.027 .006 23 .027 .031 .039	.026 .006 18 .026 .031 .033					.026 .006 41 .027 .031 .038	10
15				.031 .015 22 .028 .048 .057	.026 .012 17 .022 .040 .050					.029 .014 39 .024 .040 .056	15
20				.044 .022 11 .056 .066 .070						.044 .022 11 .056 .066 .070	20
25				.094 .002 7 .094 .095 .098						.094 .002 7 .094 .095 .098	25
30				.096 .006 5 .095 .103 .104						.096 .006 5 .095 .103 .104	30
35			.100 .044 10 .074 .150 .173	.148 .070 48 .128 .231 .274						.140 .068 56 .115 .227 .271	35
40											40
45S											45S

LONGITUDE

TABLE XII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60				.453 .492 .103 .533 7 .540	.256 .224 .175 .485 16 .492	.467 .467 .019 .480 2 .485				.331 .336 .178 .492 24 .537	60
55				.447 .487 .193 .610 43 .634	.287 .286 .188 .423 16 .637	.499 .522 .172 .646 43 .927	.478 .509 .076 .545 5 .570			.445 .477 .189 .602 107 .840	55
50				.364 .372 .227 .573 83 .656	.202 .177 .103 .323 30 .384	.428 .407 .179 .607 58 .755	.332 .273 .177 .467 9 .713			.356 .330 .207 .577 180 .841	50
45			.236 .186 .189 .292 16 .732	.369 .314 .225 .633 40 .846	.131 .089 .098 .248 47 .361	.381 .325 .248 .644 93 .844	.155 .145 .025 .189 5 .201			.303 .229 .235 .579 201 .359	45
40	.172 .179 .049 .218 10 .241		.163 .114 .134 .264 56 .541		.156 .180 .084 .226 31 .309	.268 .226 .209 .429 95 .858	.150 1	.280 .241 .114 .327 6 .499		.216 .123 .175 .333 .98 .744	40
35	.124 .119 .050 .167 60 .252		.124 .112 .095 .174 19 .368	.079 .079 .003 .081 2 .082	.129 .107 .084 .186 90 .376	.271 .236 .185 .389 20 .747				.145 .114 .107 .189 151 .417	35
30	.050 .041 .039 .084 34 .143		.049 .049 .004 .092 6 .094		.184 .184 .089 .214 77 .481					.125 .113 .092 .201 117 .432	30
25	.075 .075 .012 .086 18 .095	.081 .080 .007 .089 8 .073	.081 1	0.000 0.000 0.000 0.000 0.000 8	.098 .090 .087 .181 87 .266					.083 .073 .054 .119 101 .205	25
20		.081 .056 .013 .062 22 .069	.027 .022 .013 .043 12 .060	.000 0.000 .001 .001 2 .002	.068 .040 .049 .111 36 .187					.049 .038 .041 .087 79 .169	20
15			.016 .011 .011 .031 28 .039	.004 .003 .006 .007 10 .018	.046 .041 .023 .083 41 .100					.030 .026 .025 .054 79 .098	15
10			.014 .012 .010 .026 27 .034		.029 .027 .008 .033 30 .044					.021 .024 .011 .030 57 .042	10
5		.010 .009 .008 .018 3 .020	.014 .012 .008 .023 11 .026		.026 .024 .007 .031 19 .039					.020 .022 .010 .030 33 .039	5
0				.028 .028 .009 .036 17 .037	.034 .030 .010 .042 8 .046					.027 .026 .010 .037 22 .043	0
5				.033 .034 .014 .047 18 .066	.027 .027 .008 .033 9 .036					.031 .026 .012 .044 28 .056	5
10				.031 .032 .014 .047 27 .061	.035 .035 .002 .036 2 .037					.031 .033 .013 .046 29 .061	10
15				.038 .032 .017 .050 21 .066	.045 .037 .029 .067 31 .097					.042 .030 .023 .056 52 .096	15
20				.051 .054 .022 .082 23 .110						.051 .054 .022 .082 23 .110	20
25				.076 .042 .055 .140 24 .169						.076 .042 .055 .140 24 .169	25
30				.112 .126 .056 .159 18 .213						.112 .124 .056 .159 18 .213	30
35				.184 .166 .082 .278 56 .322						.184 .166 .082 .278 56 .322	35
40											40
45S											45S

LONGITUDE

TABLE XII. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55				.478 .487 .490 4 .492			.575 .540 .716 4 .777			.527 .469 .623 6 .766
50				.502 .542 .779 20 .988		.651 .643 .716 3 .747	.477 .439 .669 16 .732			.555 .541 .738 39 .896
45			.372 .411 .474 11 .514	.484 .466 .501 17 .520		.838 .882 .885 7 .884	.204 .136 .475 22 .554			.389 .422 .527 57 .603
40			.277 .231 .420 38 .552			.106 .101 .154 41 .249	.360 .360 .514 2 .575			.192 .148 .307 81 .605
35			.073 .031 .077 .134 9 .241		.184 .180 .041 .211 21 .256	.093 .110 .042 .129 21 .138				.119 .126 .063 .159 51 .256
30			.017 .018 .008 .021 8 .028		.103 .106 .048 .157 21 .187					.077 .070 .057 .144 30 .185
25	.069 .070 .010 .080 21 .086	.073 .075 .010 .080 8 .086	.034 .018 .024 .066 14 .071		.033 .032 .004 .037 10 .040					.054 .061 .023 .075 53 .089
20		.083 .082 .011 .084 28 .086	.044 .047 .024 .067 14 .077		.059 .057 .006 .064 3 .067					.050 .054 .017 .065 43 .074
15			.022 .021 .008 .031 13 .036		.024 .024 .003 .027 5 .028					.022 .020 .007 .029 18 .036
10			.011 .011 .012 .016 20 .041							.011 .011 .012 .016 20 .041
5		.018 .010 .015 .030 8 .049	.008 .009 .005 .012 10 .014		.020 .020 .002 .021 5 .023					.014 .012 .011 .020 24 .043
0				.028 .026 .004 .029 5 .030	.019 1					.024 .023 .004 .026 6 .030
5				.025 .026 .001 .026 4 .026						.025 .025 .001 .026 4 .026
10				.023 .024 .003 .025 5 .026						.023 .024 .003 .025 5 .025
15				.037 .027 .022 .065 14 .076	.044 .037 .022 .065 52 .086					.042 .035 .022 .065 66 .085
20										
25				.111 .109 .008 .118 4 .124						.111 .109 .008 .118 4 .124
30				.111 .111 .006 .114 2 .116						.111 .111 .006 .114 2 .116
35				.187 .148 .099 .323 49 .433						.187 .148 .099 .323 49 .433
40										
45S										

LONGITUDE

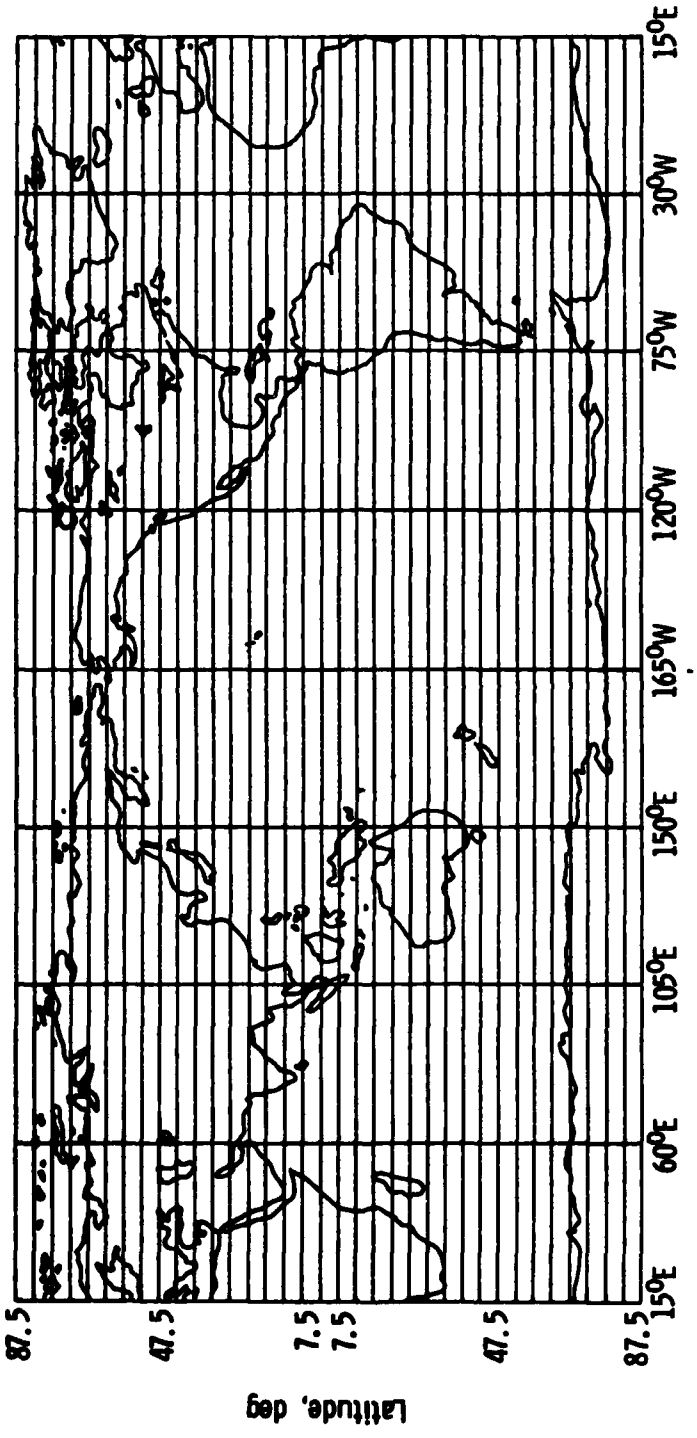
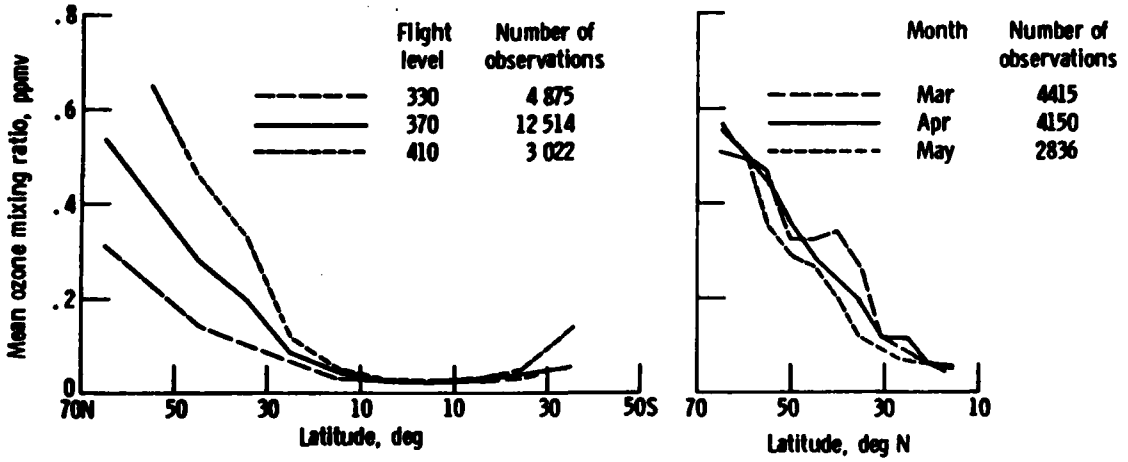


Figure 1. - Geographical grid for ozone tabulations in tables I to XII.



(a) By flight level.

(b) By month at FL 370.

Figure 2. - Variation of mean ambient ozone with latitude in the spring (M-A-M).

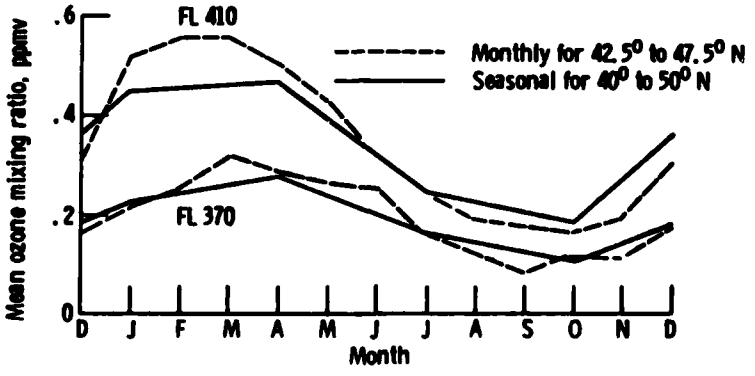
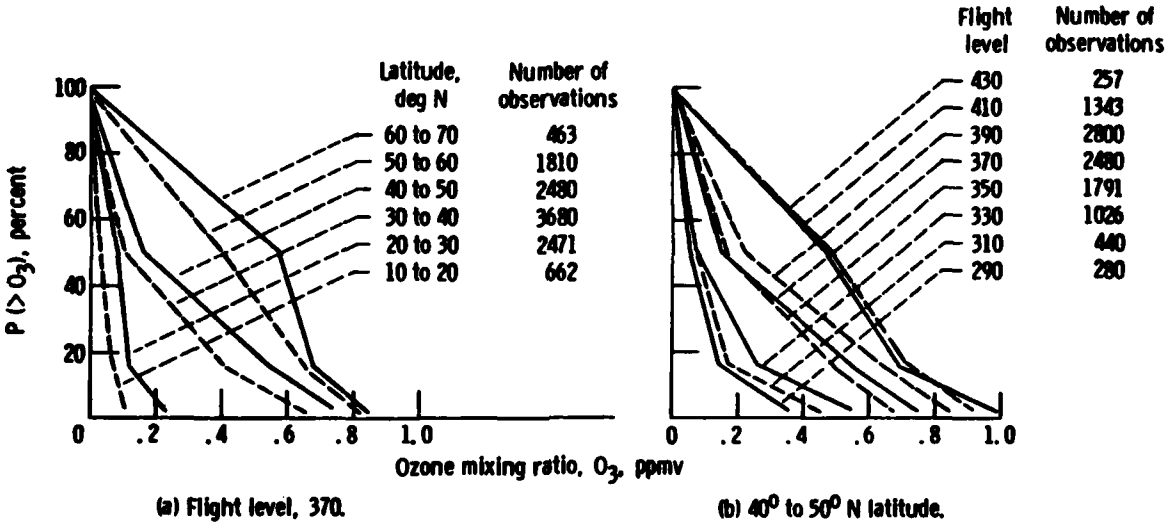


Figure 3. - Seasonal variation of mean ambient ozone near 45° N for flight levels 370 and 410.



(a) Flight level, 370.

(b) 40° to 50° N latitude.

Figure 4. - Ambient ozone cumulative frequency distributions for spring (M-A-M).

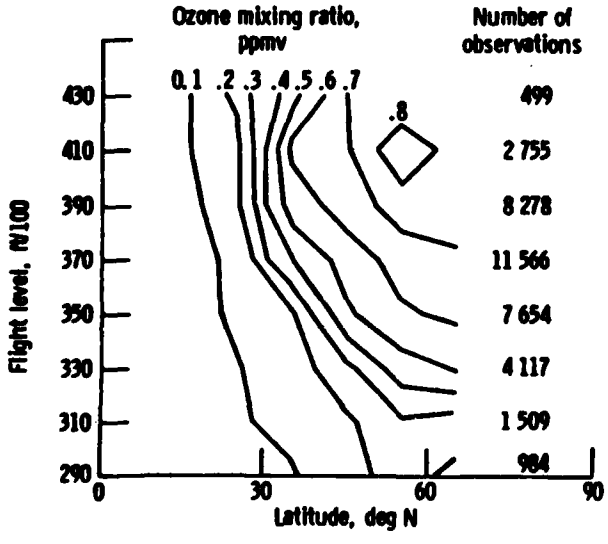


Figure 5. - Northern Hemisphere latitude - flight level cross sections of zonal 84th percentile ozone mixing ratios in the spring.

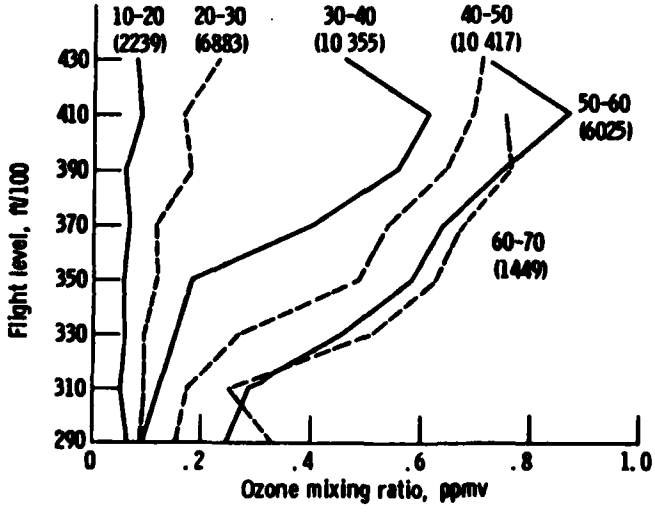


Figure 6. - Vertical profiles of zonal 84th percentile ozone mixing ratios for selected latitudes (deg N). Number of observations for each latitude is given in parentheses.

APPENDIX A

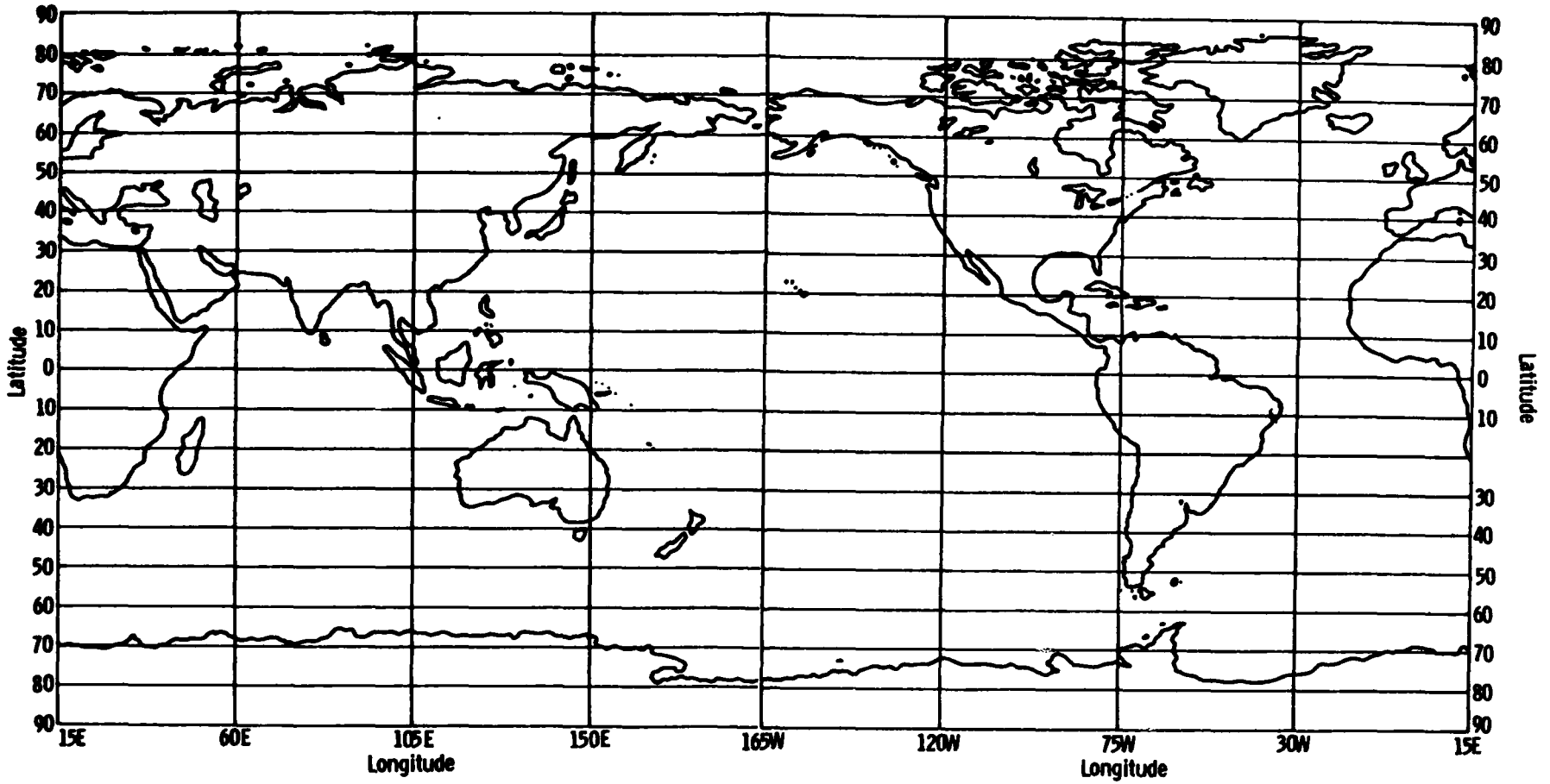
OZONE UNIT CONVERSION FACTORS

[Multiply "From" units by this factor to get "To" units. All temperatures are in K and all pressures in hectopascals (hPa).]

From	To						
	$\mu g/m^3$	10^{-3} cm SPT/km	mol/cm^3	hPa	$\mu g/g$	ppm v	ppm v SLE
$\mu g/m^3$	1	0.0467	1.26×10^{10}	1.73×10^{-3} T/P	2.87×10^{-3} T/P	1.73×10^{-3} T/P	5.09×10^{-4}
10^{-3} cm STP/km	21.4	1	2.69×10^{11}	0.037 QT	0.614 T/P	0.0370 T/P	0.0109
Molecules	7.97×10^{-11}	3.72×10^{-12}	1	1.38×10^{-13}	2.29×10^{-13} T/P	1.38×10^{-13} T/P	4.06×10^{-14}
$\mu g/g$ (ppmw)	348 P/T	16.3 P/T	4.37×10^{12} P/T	0.603 P	1	0.603	0.177 P/T
Partial pressure, hPa (mbar)	578/T	27.0/T	7.25×10^{12} P/T	1	1.66/P	1/P	0.294/T
Parts per million by volume (ppmv)	578 P/T	27.0 P/T	7.25×10^{12} P/T	P	1.66	1	0.294 P/T
Parts per million by volume, sea level equivalent (ppmv SLE)	1.96×10^3	91.8	2.46×10^{13}	3.40T	5.64 T/P	340 T/P	1

APPENDIX B

TABULATIONS OF GASP AMBIENT OZONE DATA BY SEASON AND LATITUDE FOR 2000-FOOT ALTITUDE INTERVALS

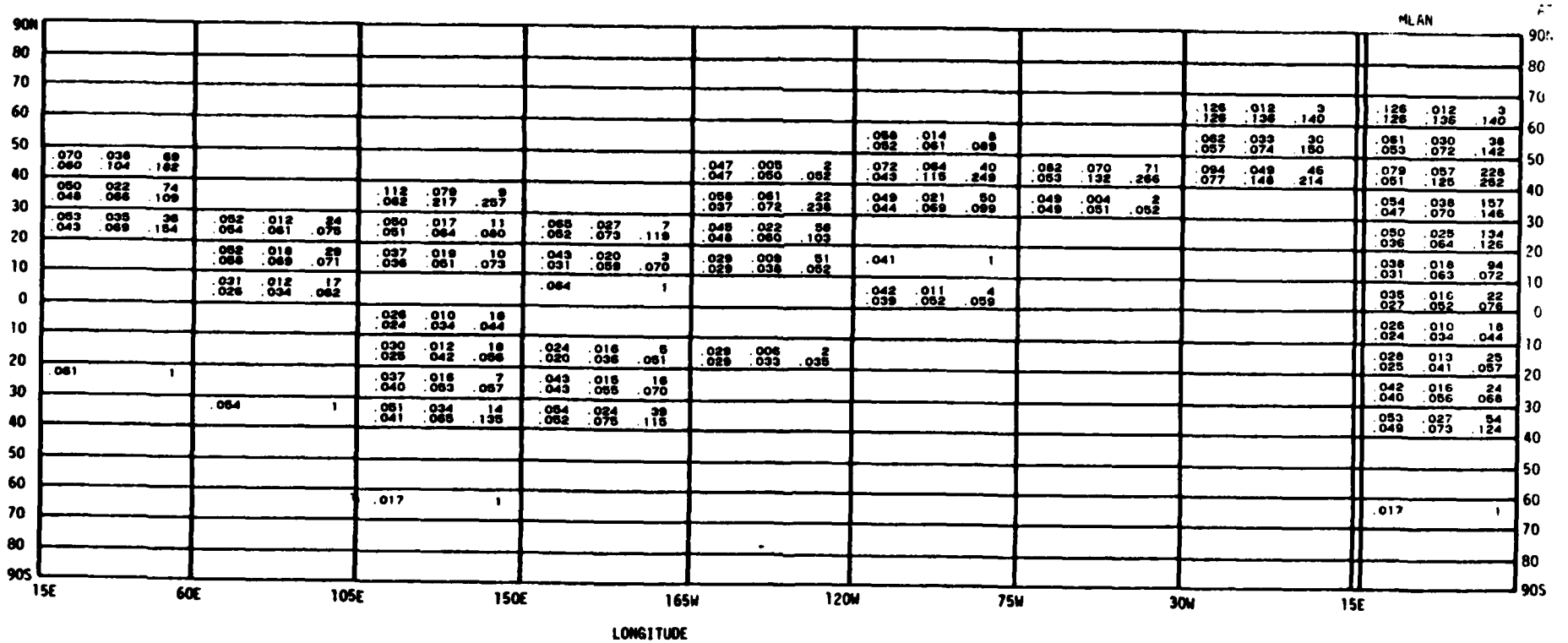


Geographical grid used for appendix B ozone tabulations.

CODE:

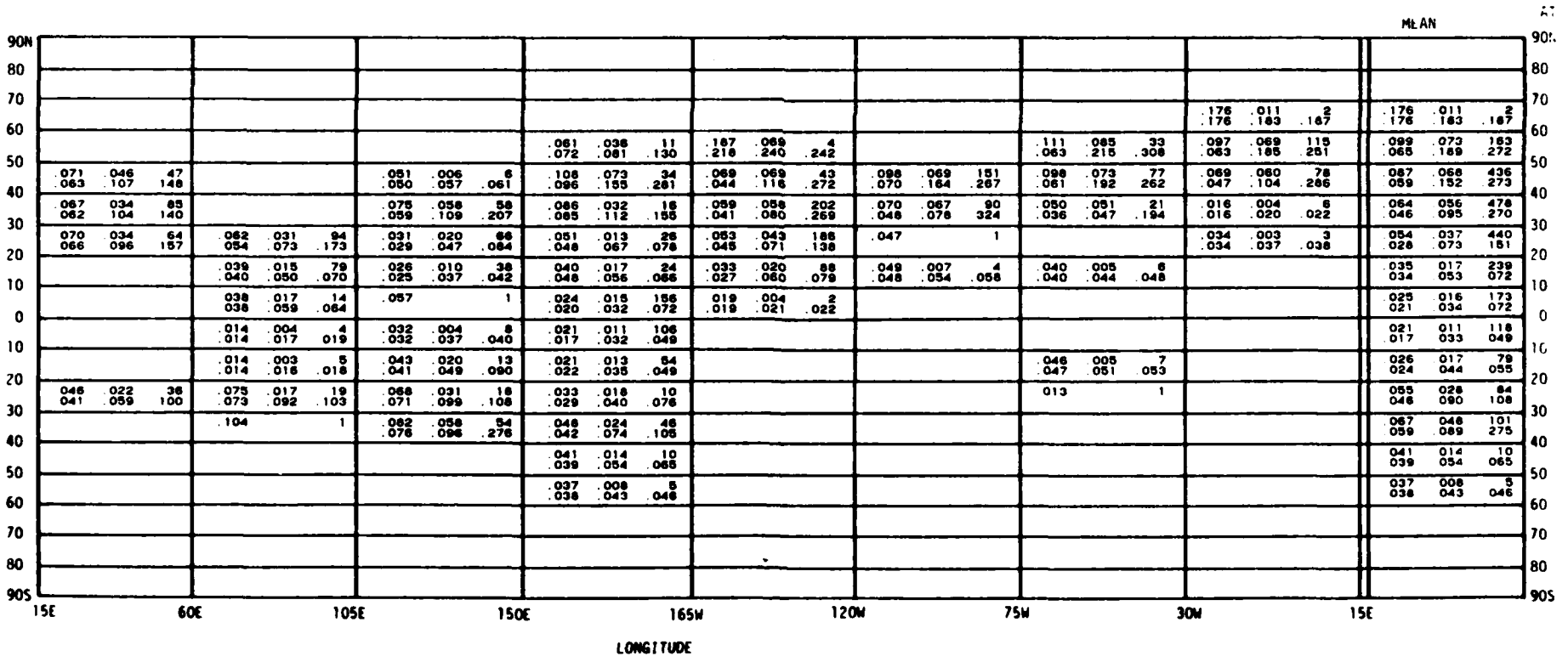
MEAN	ST. DEV.	N
50%	84%	98%

WINTER
FL 290



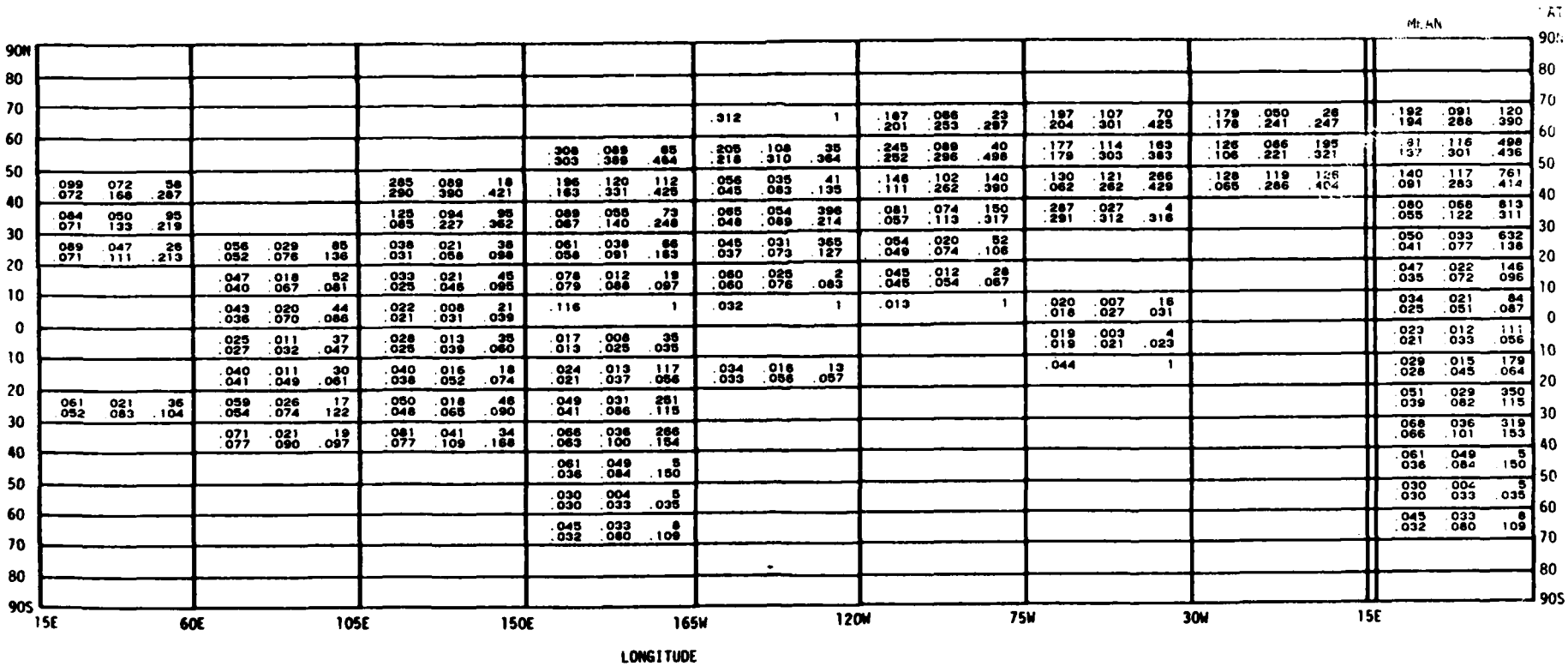
CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

WINTER
FL 310



CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

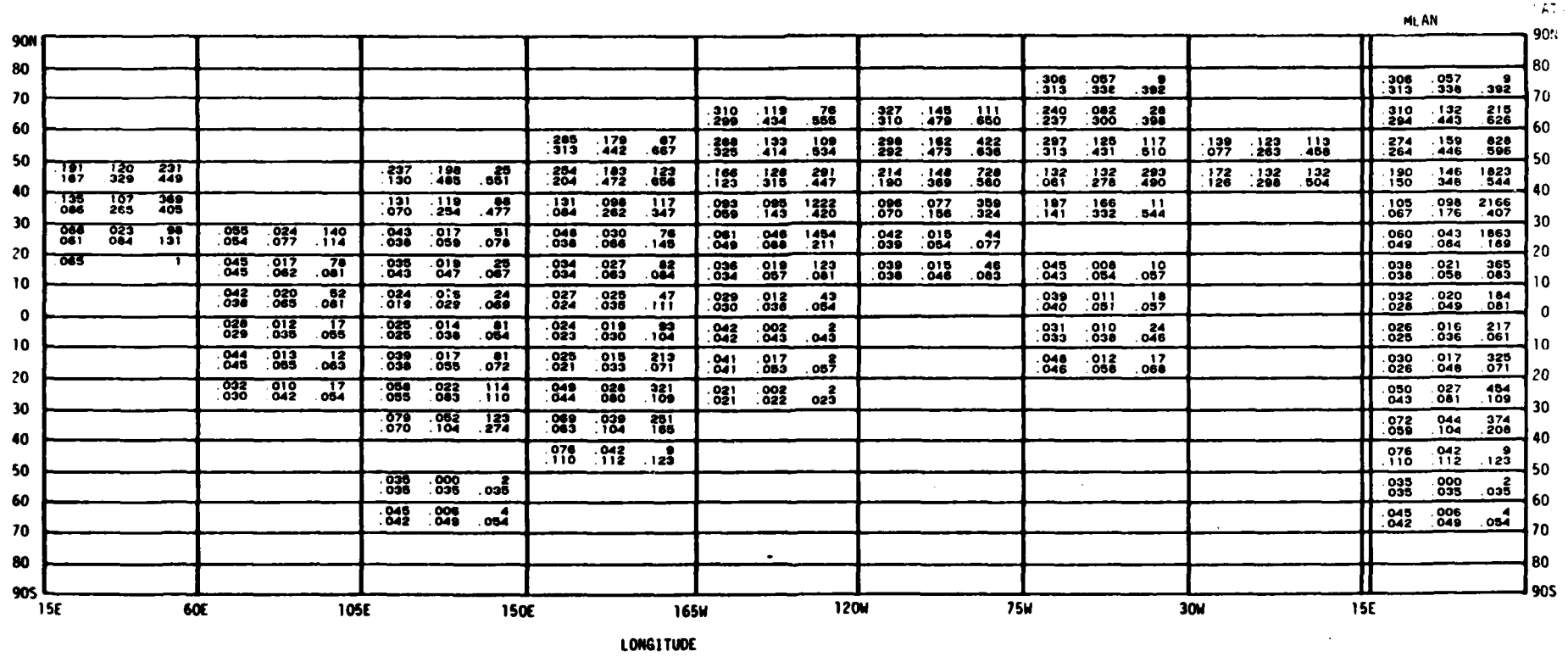
WINTER
FL 330



CODE:

MEAN	ST. DEV.	N
50%	84%	98%

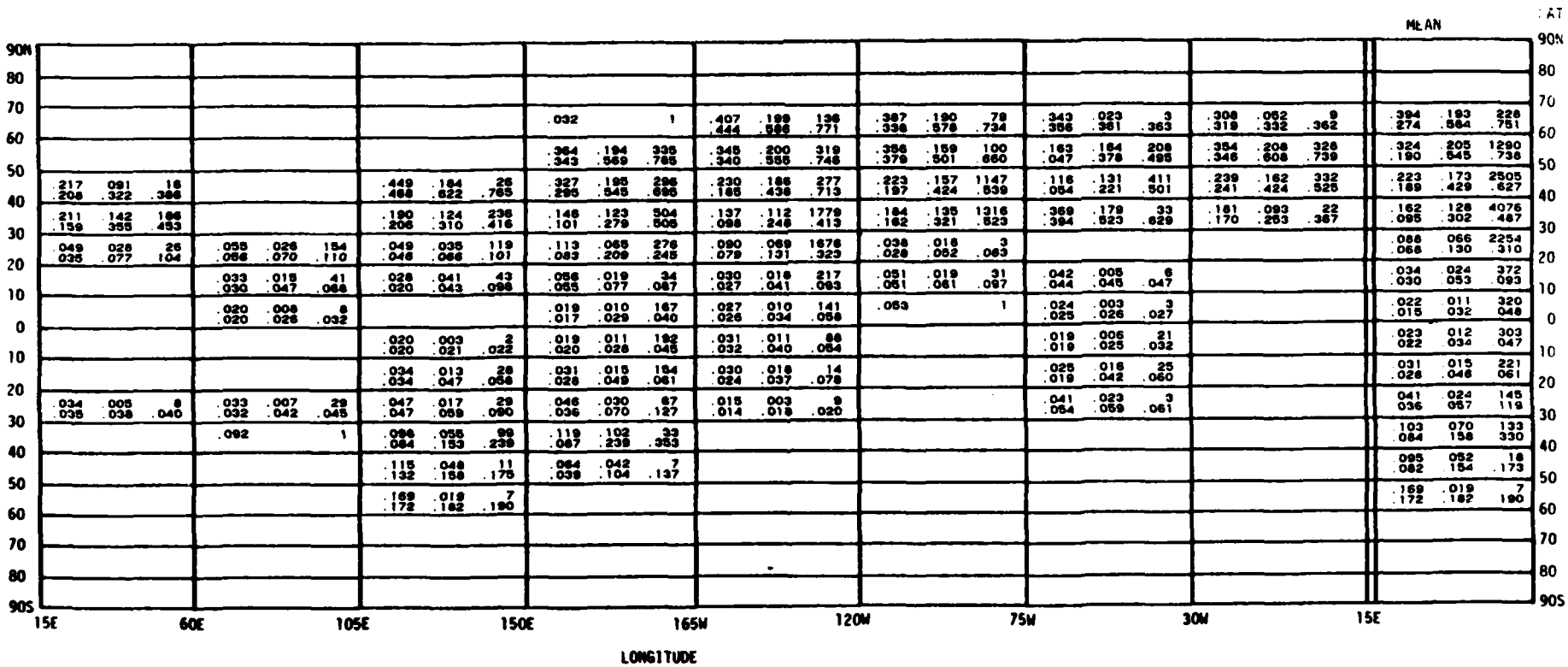
WINTER
FL 350



CODE:

MEAN	ST. DEV.	N
50%	84%	98%

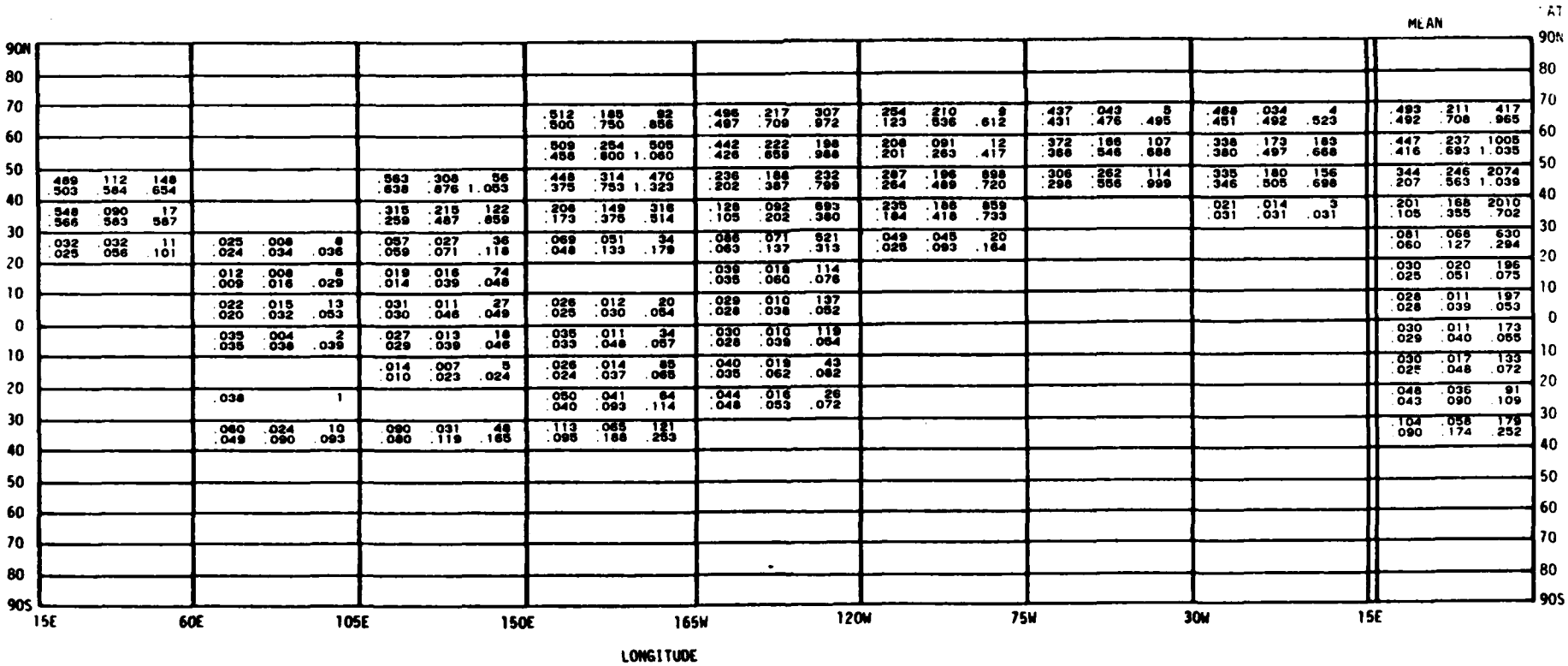
WINTER
FL 370



CODE:

MEAN	ST. DEV.	N
50%	84%	98%

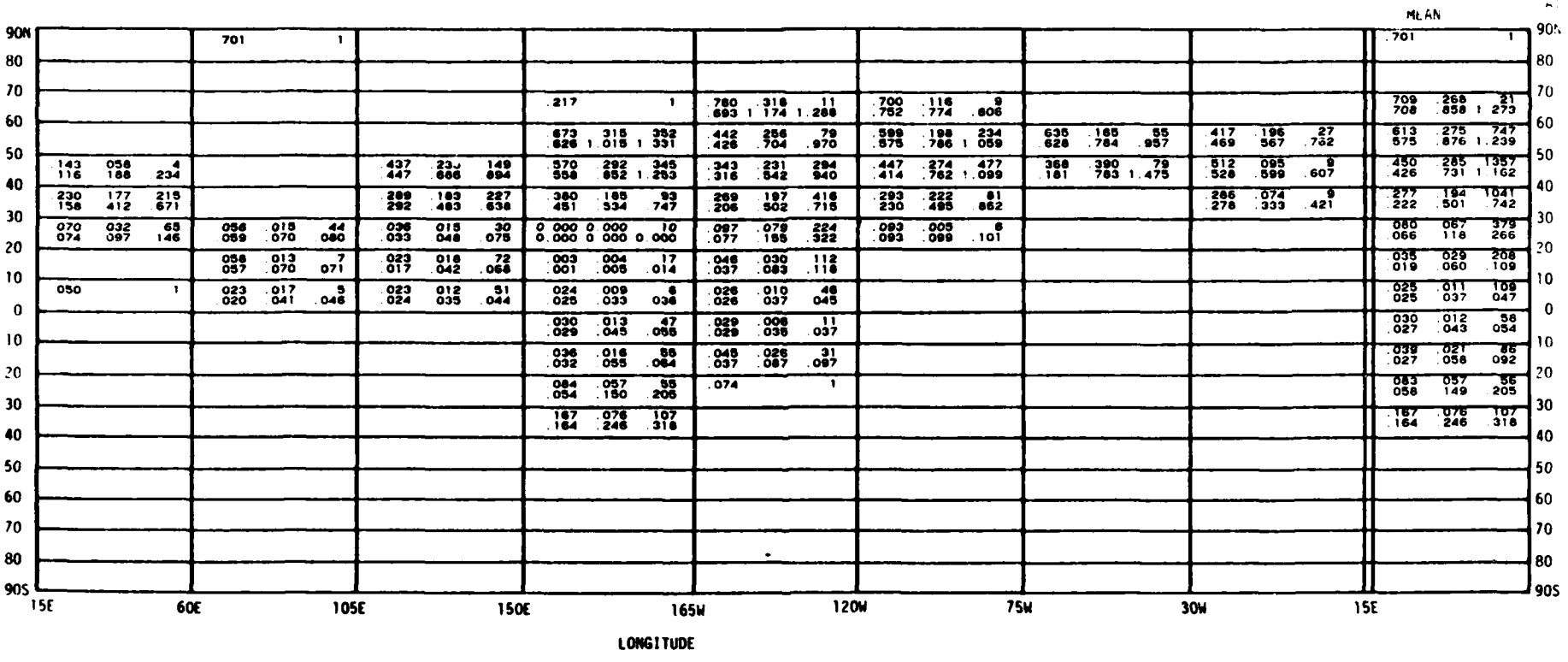
WINTER
FL 390



CODE:

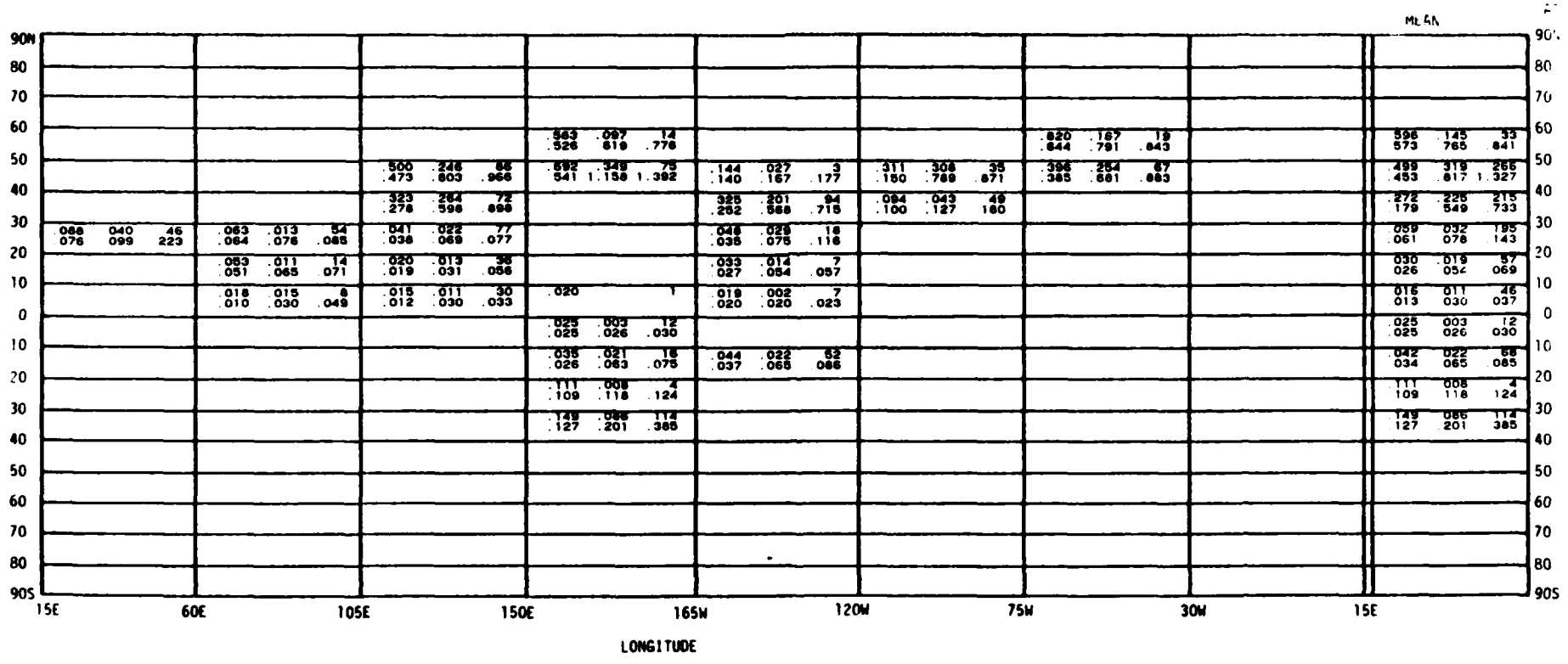
MEAN	ST. DEV.	N
50'	84'	98'

WINTER
FL 410



CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

WINTER
FL 430



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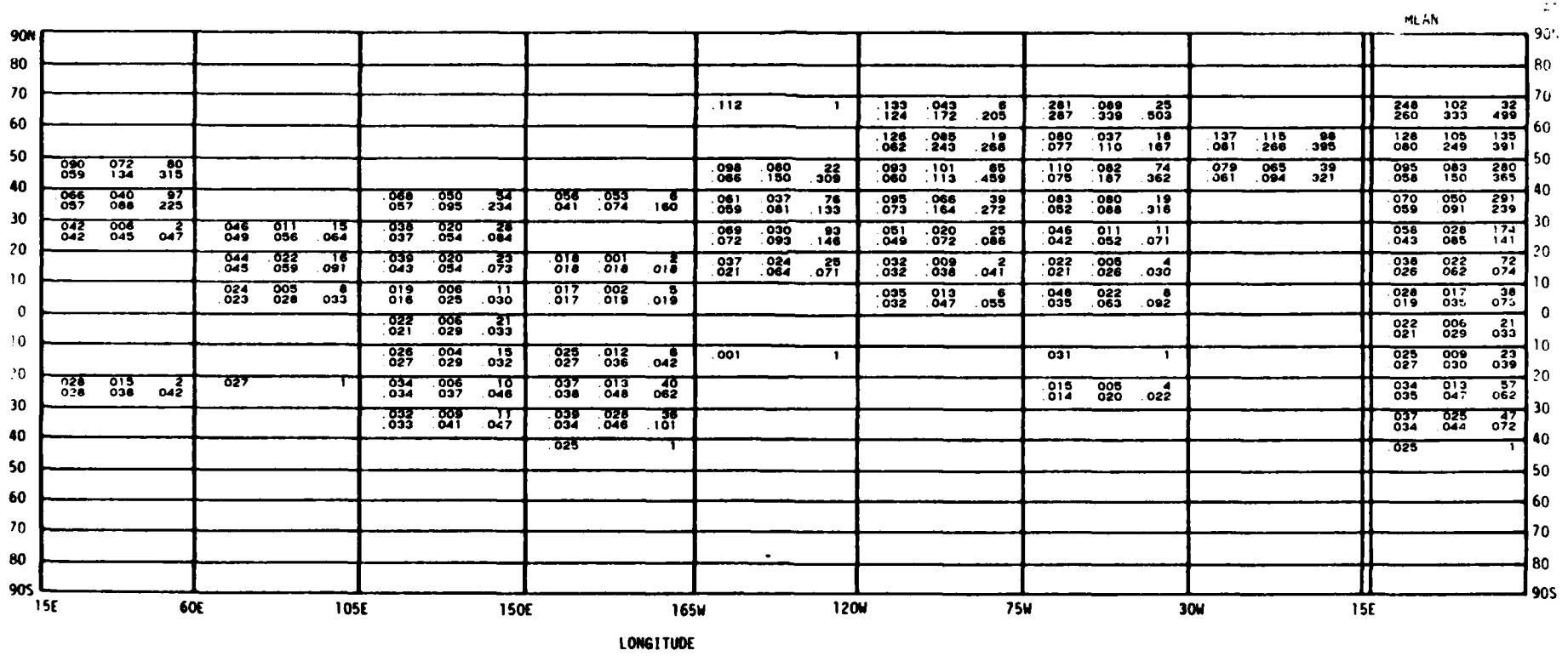

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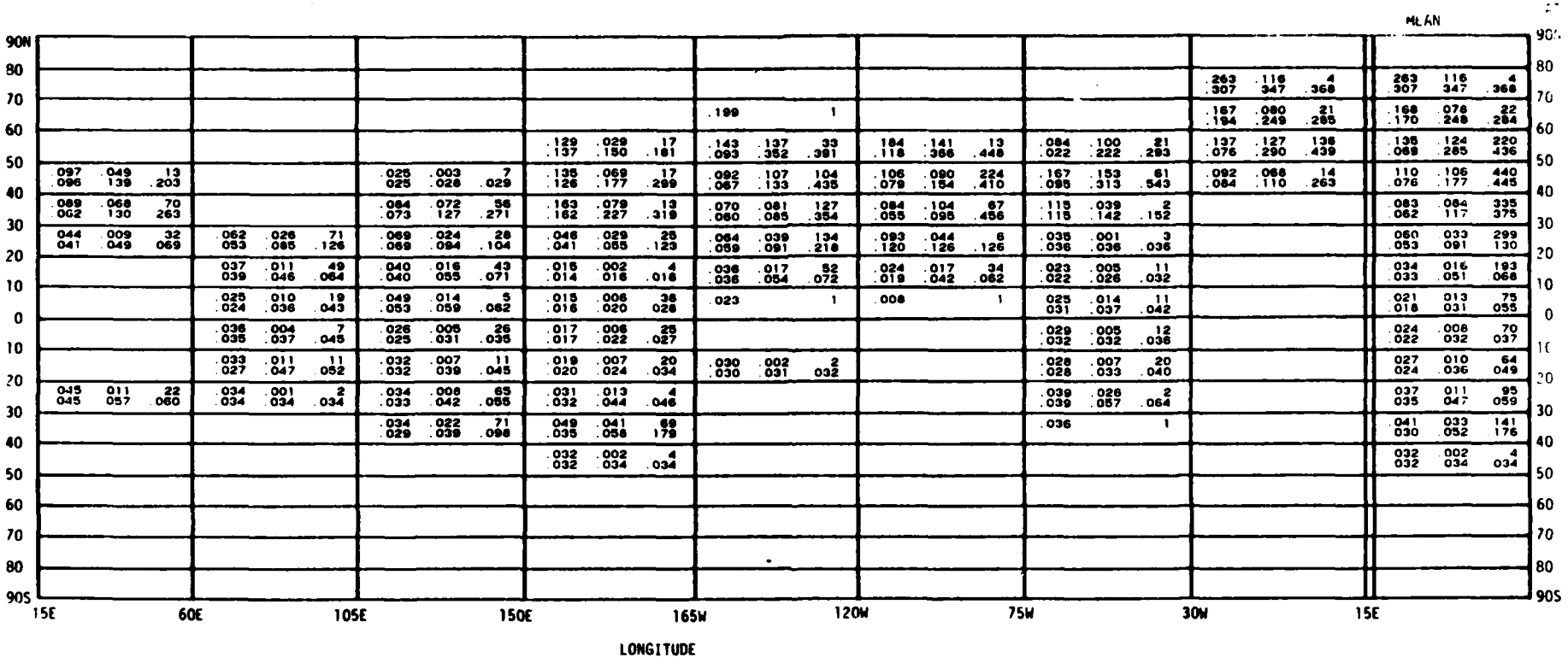

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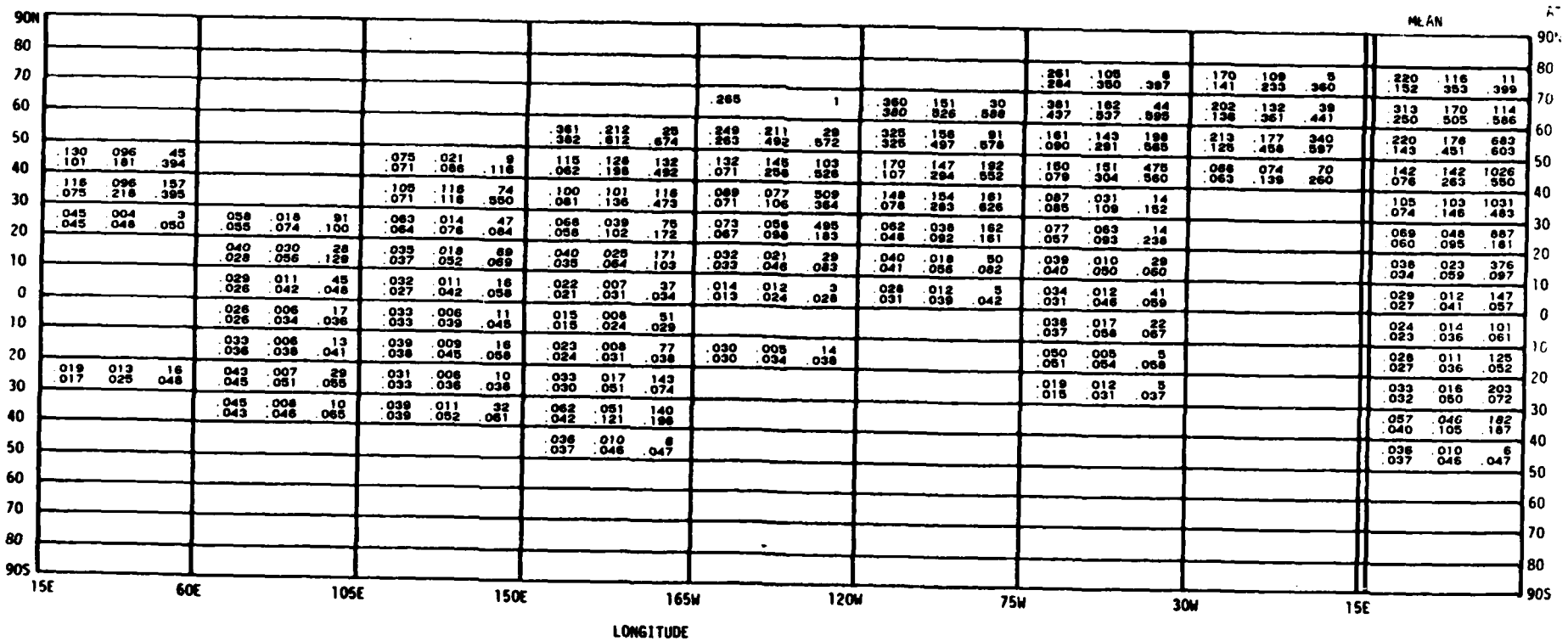

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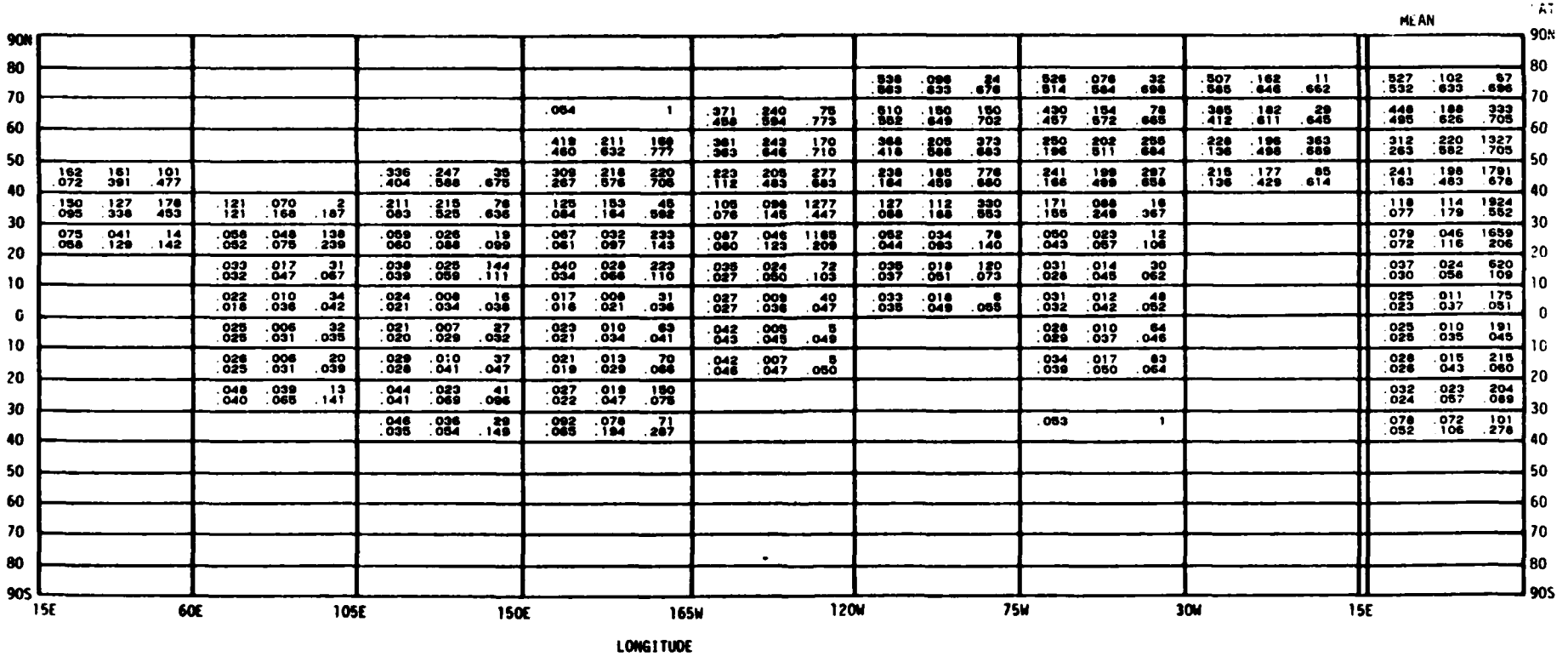

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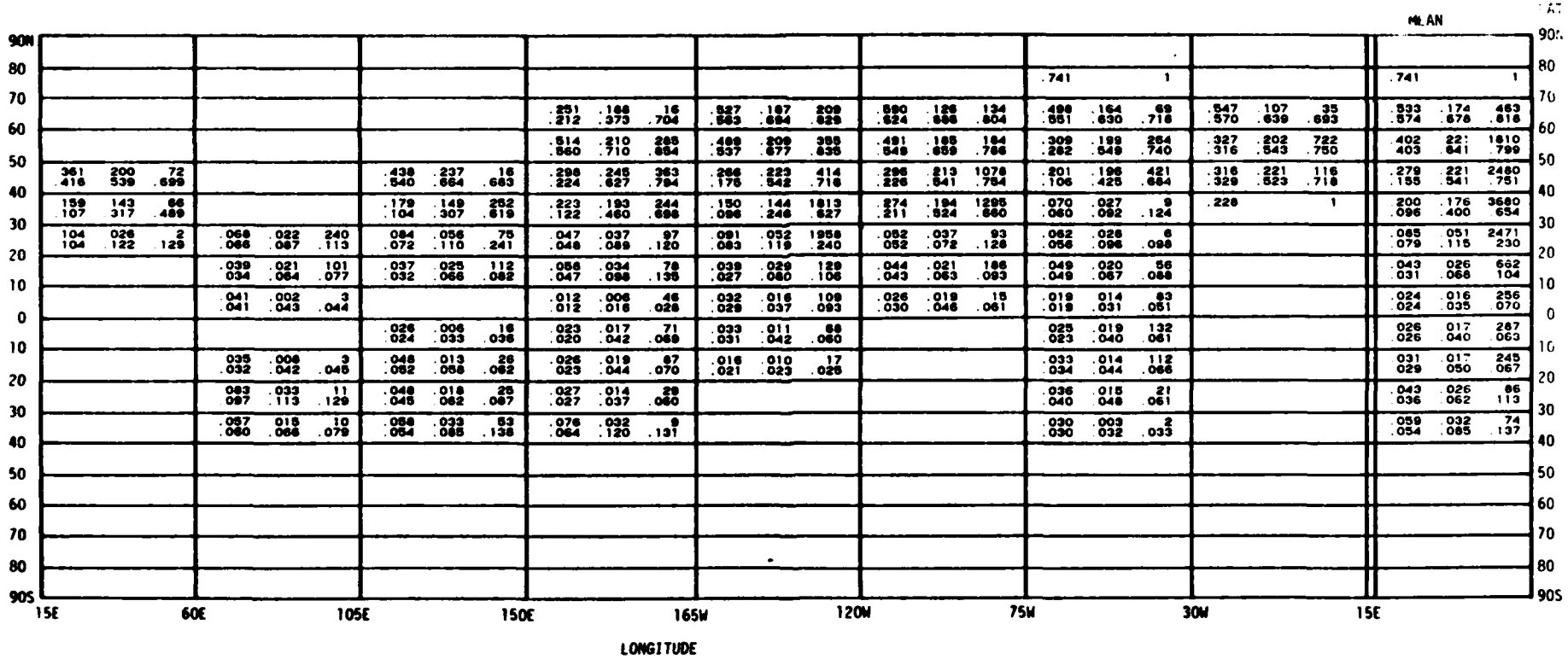

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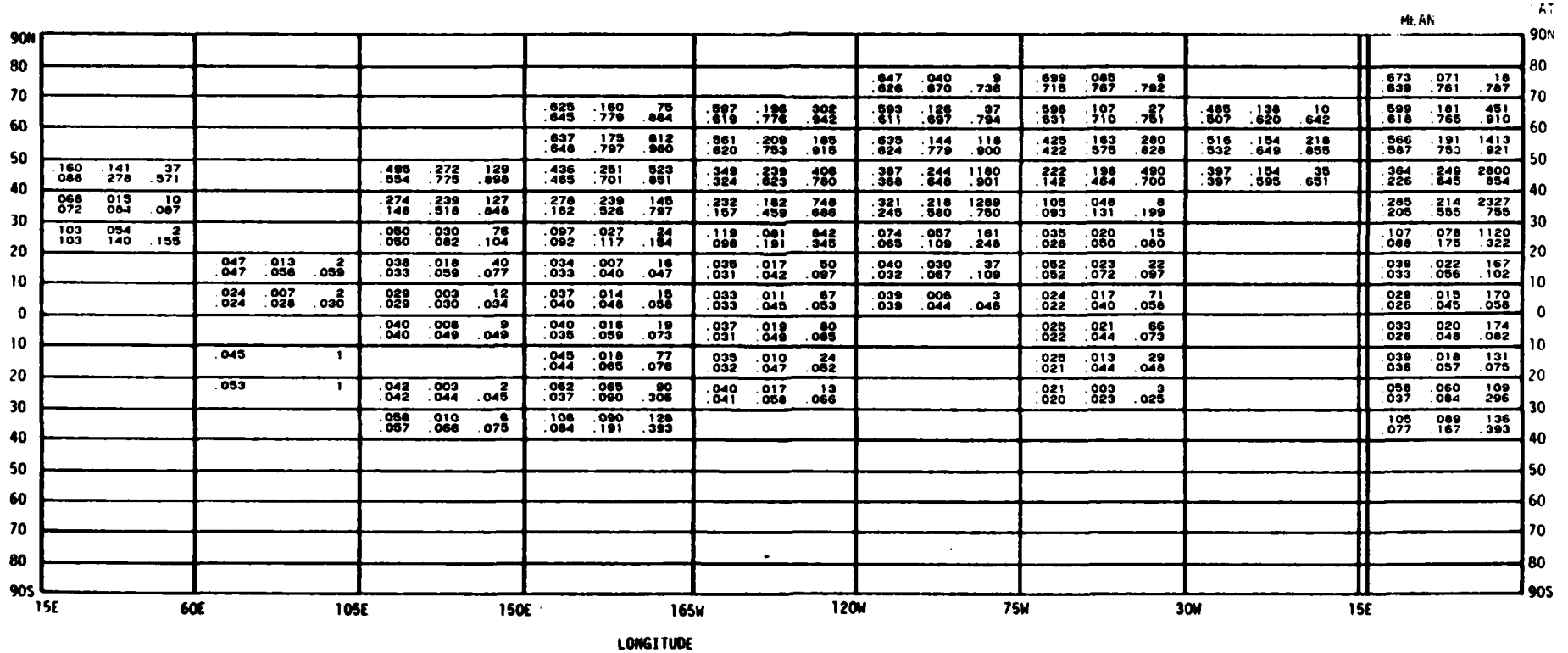

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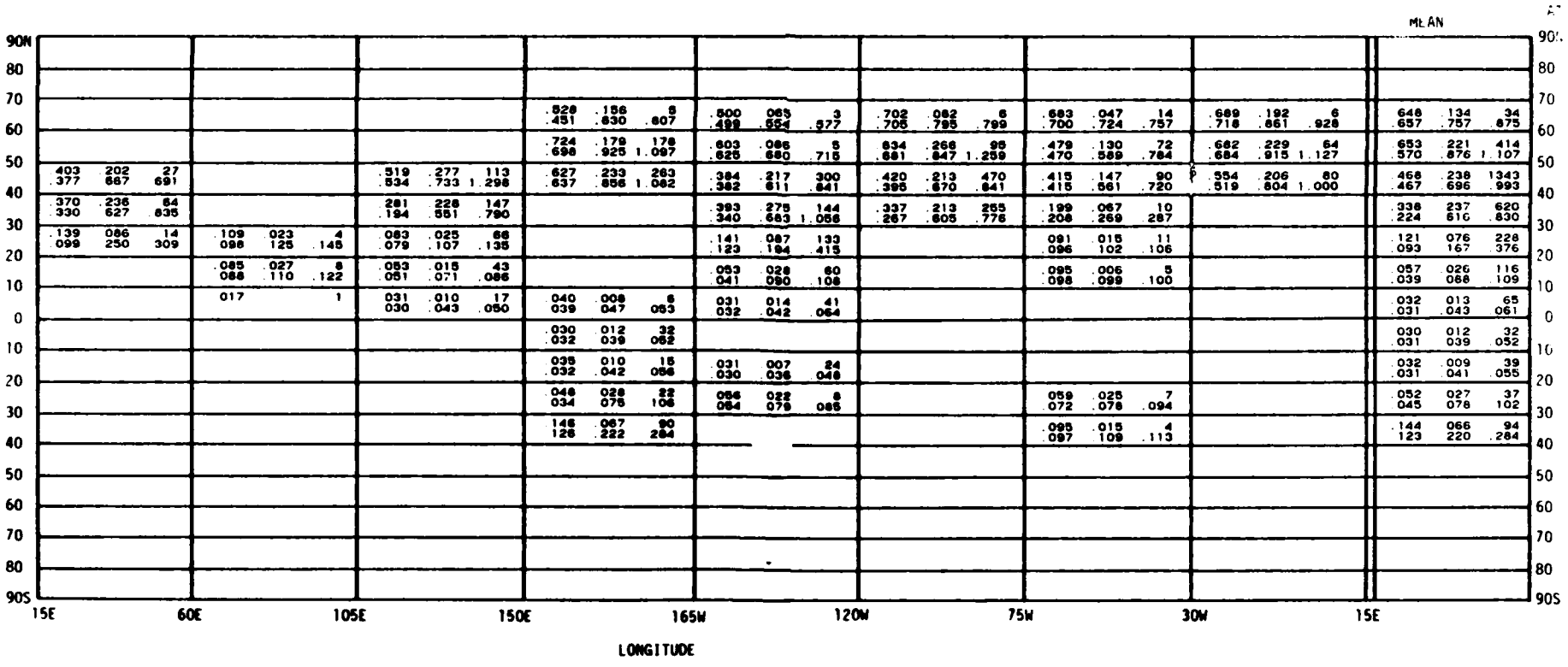

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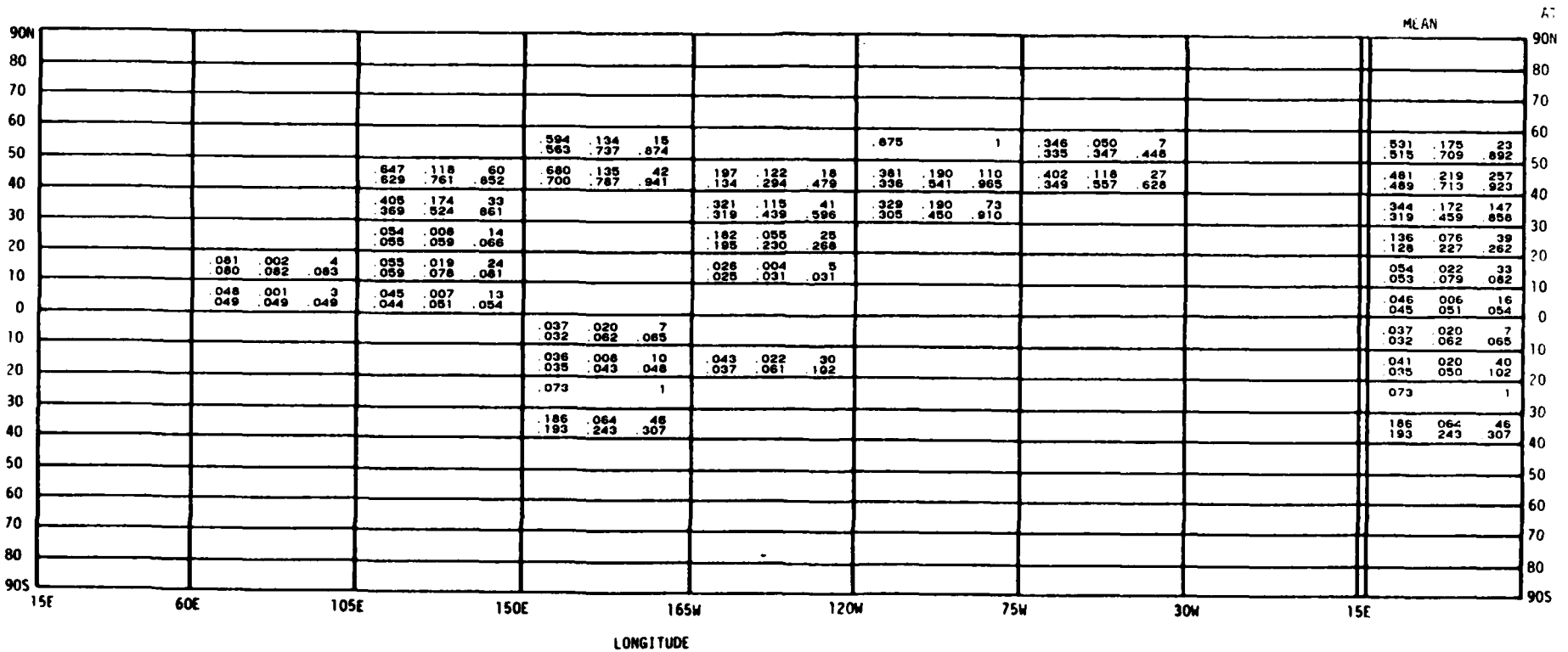

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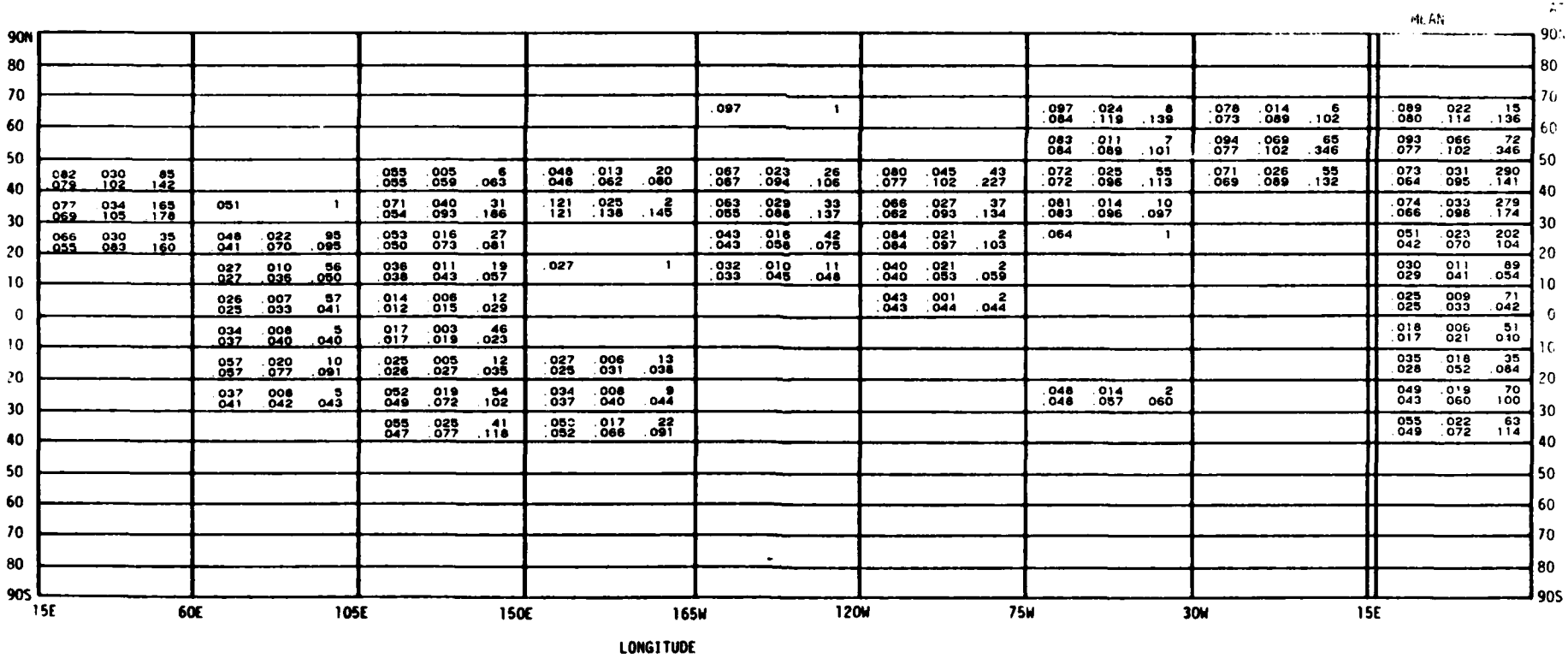

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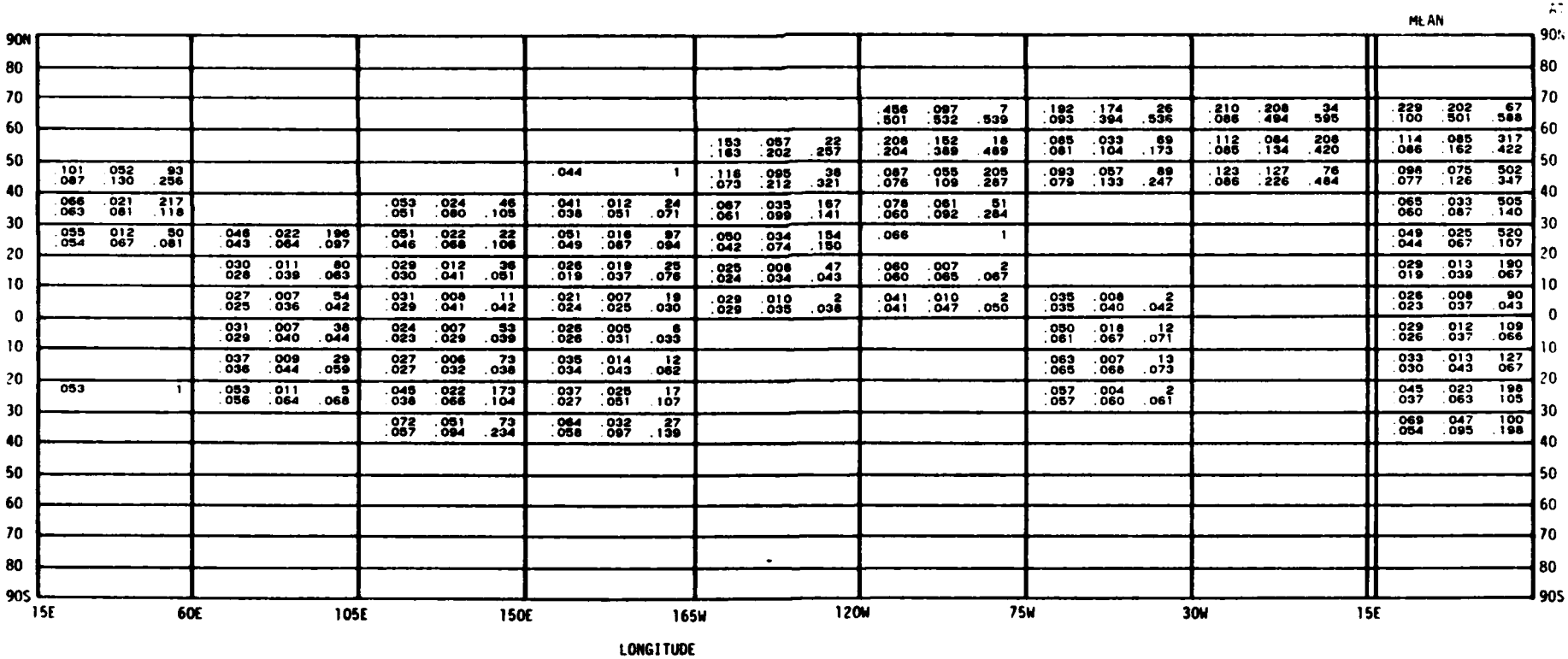

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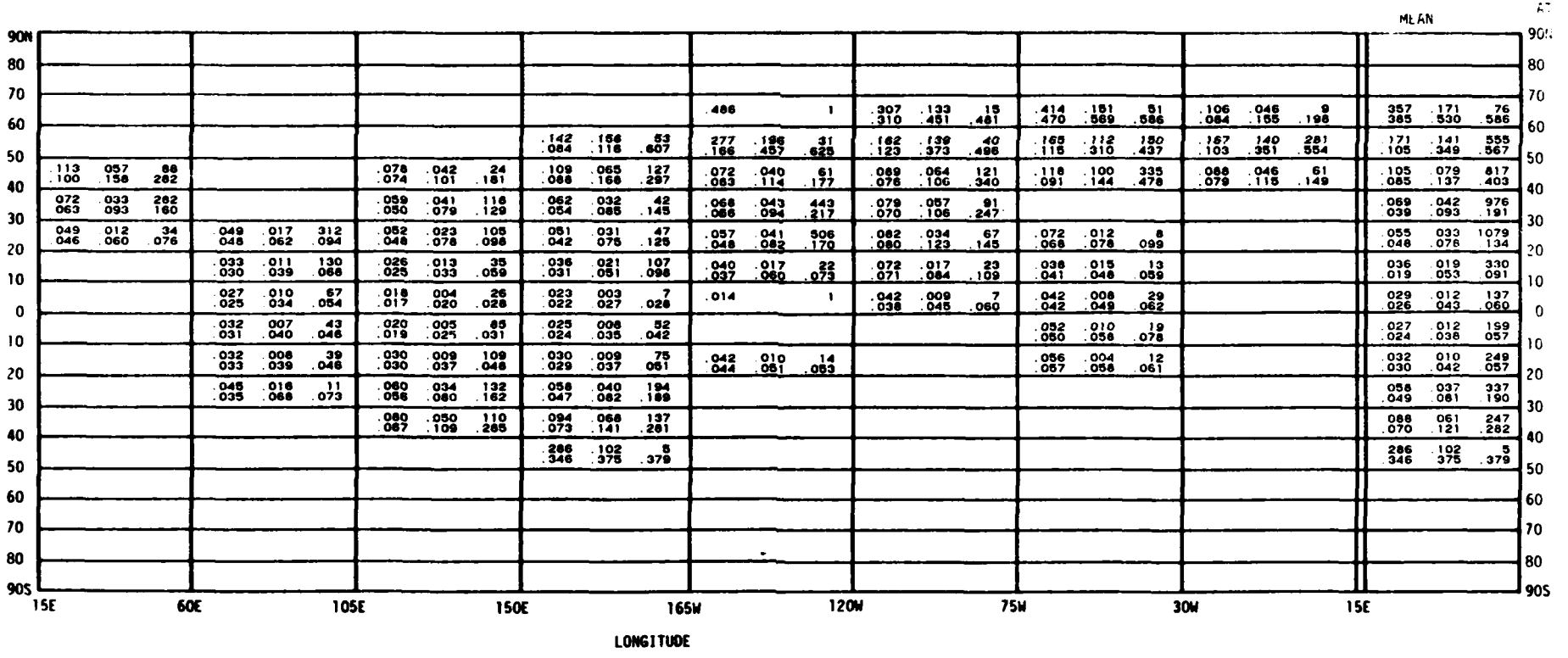

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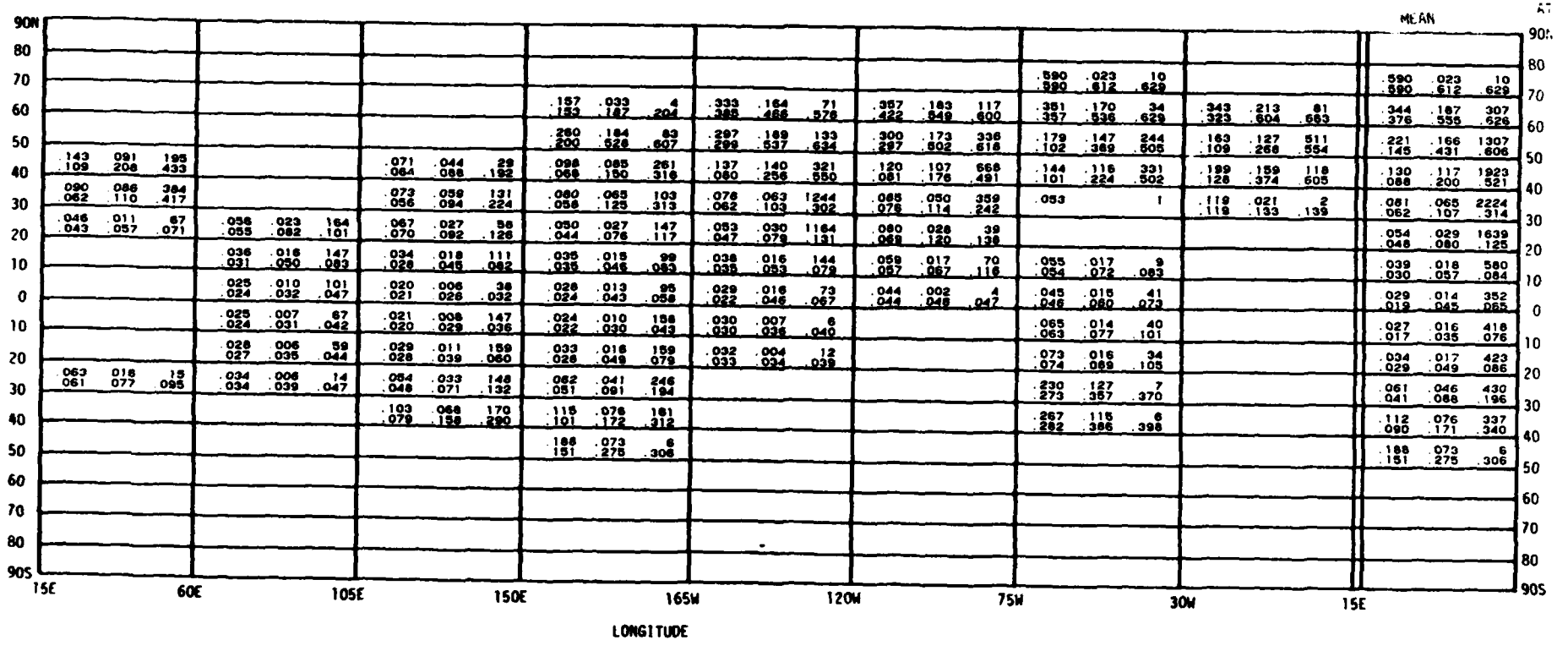

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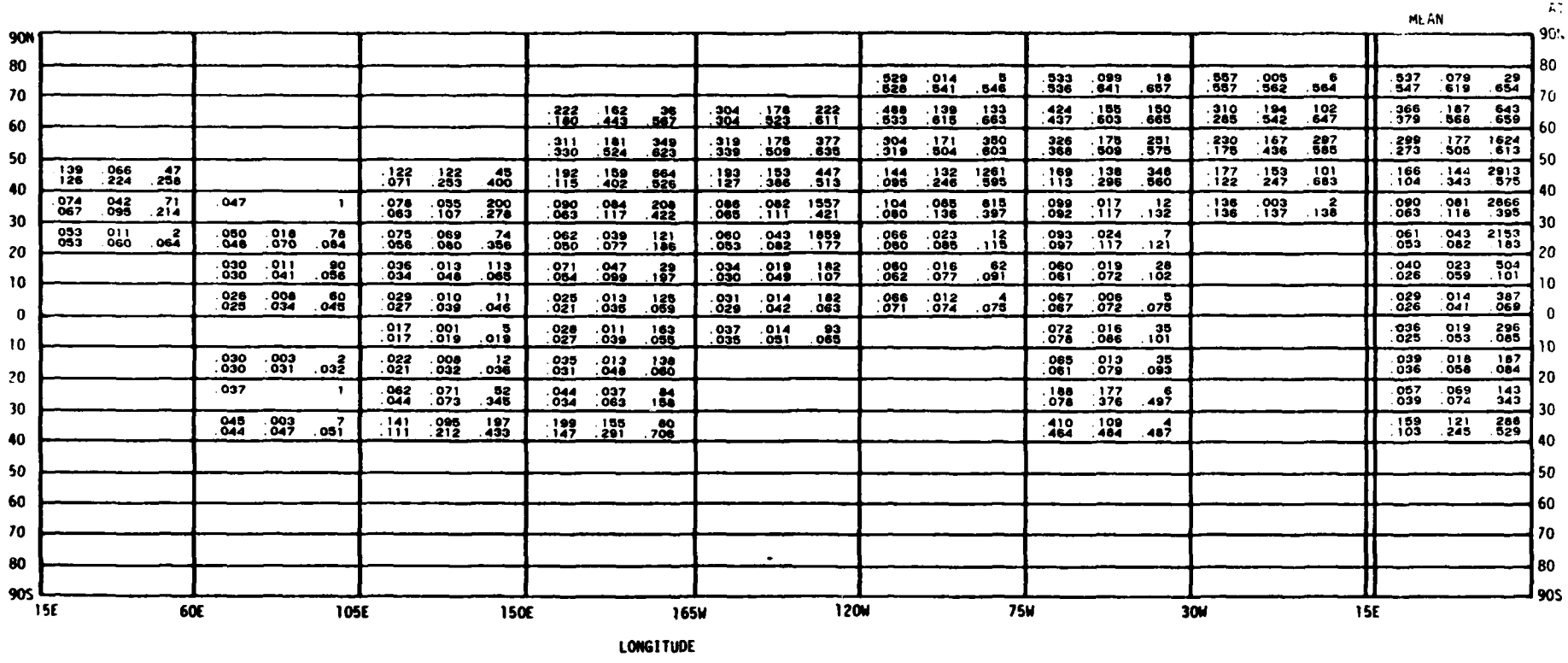

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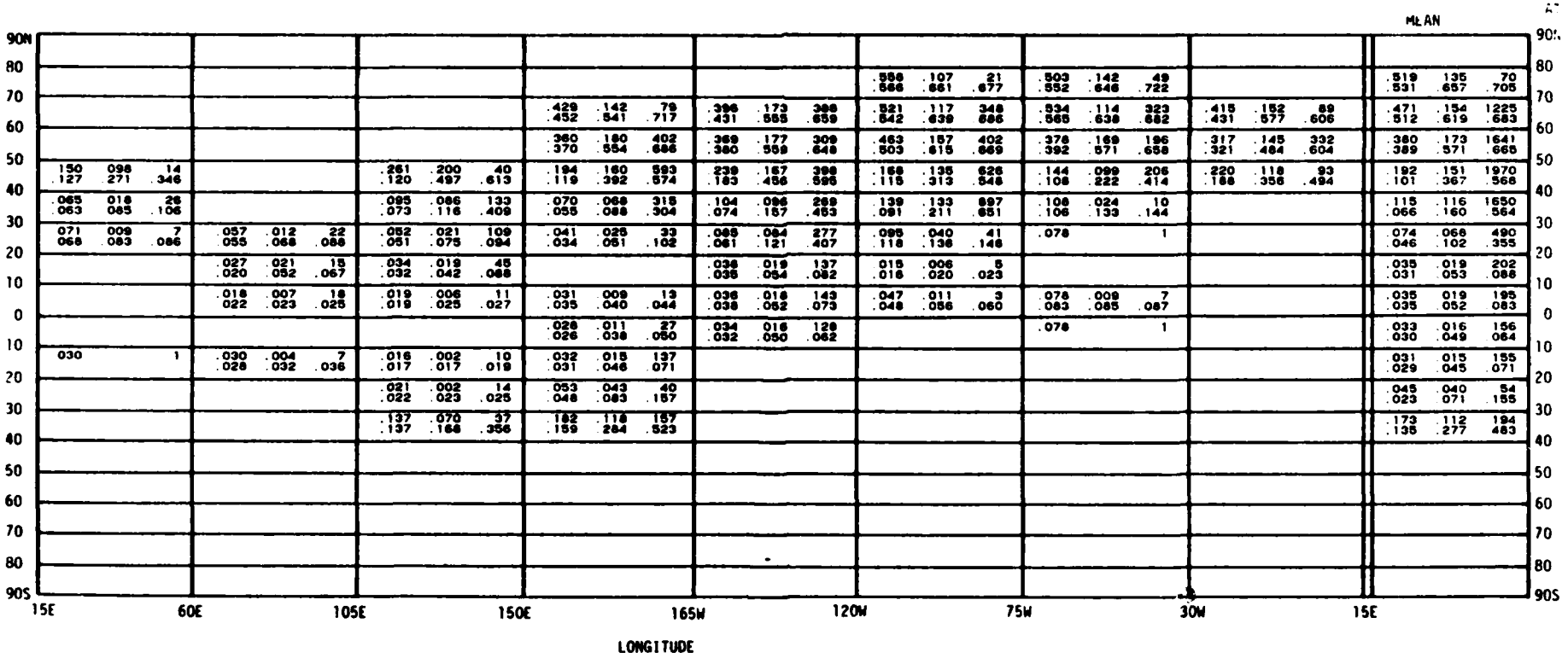

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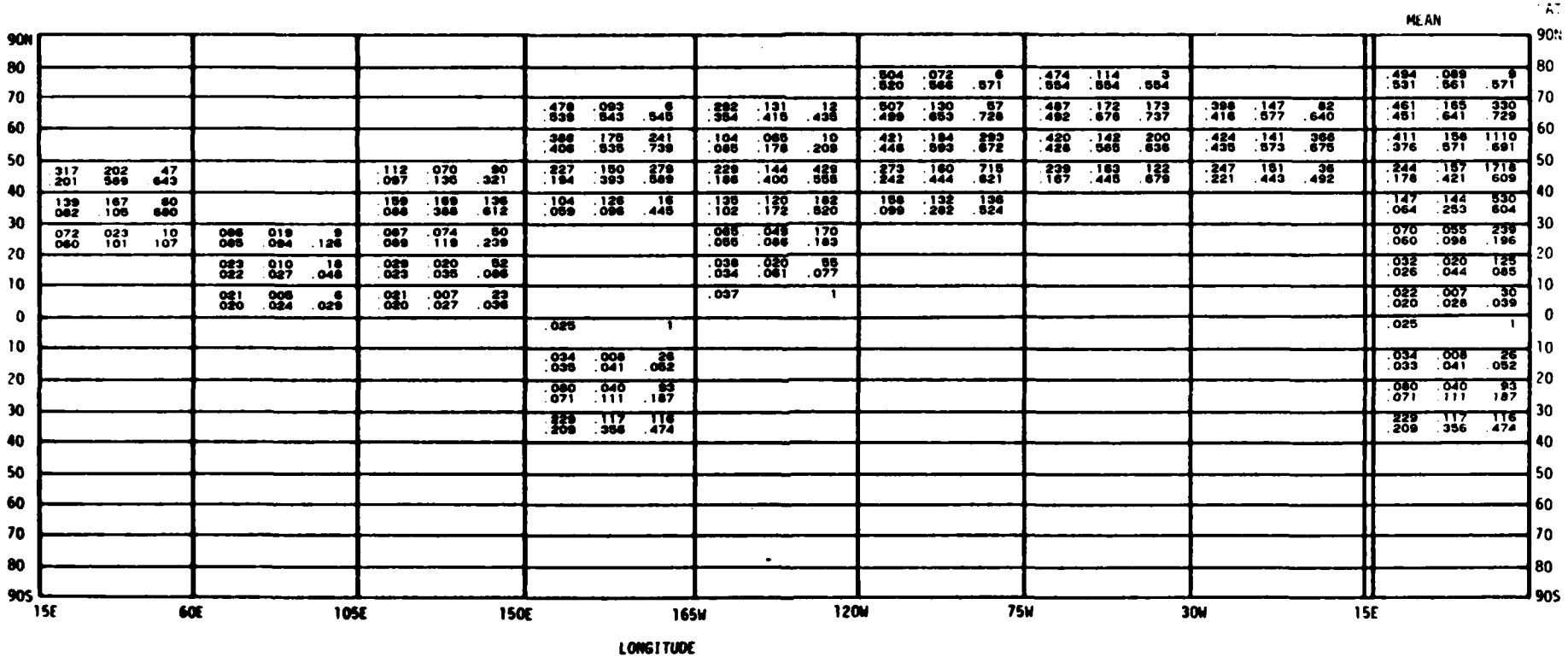

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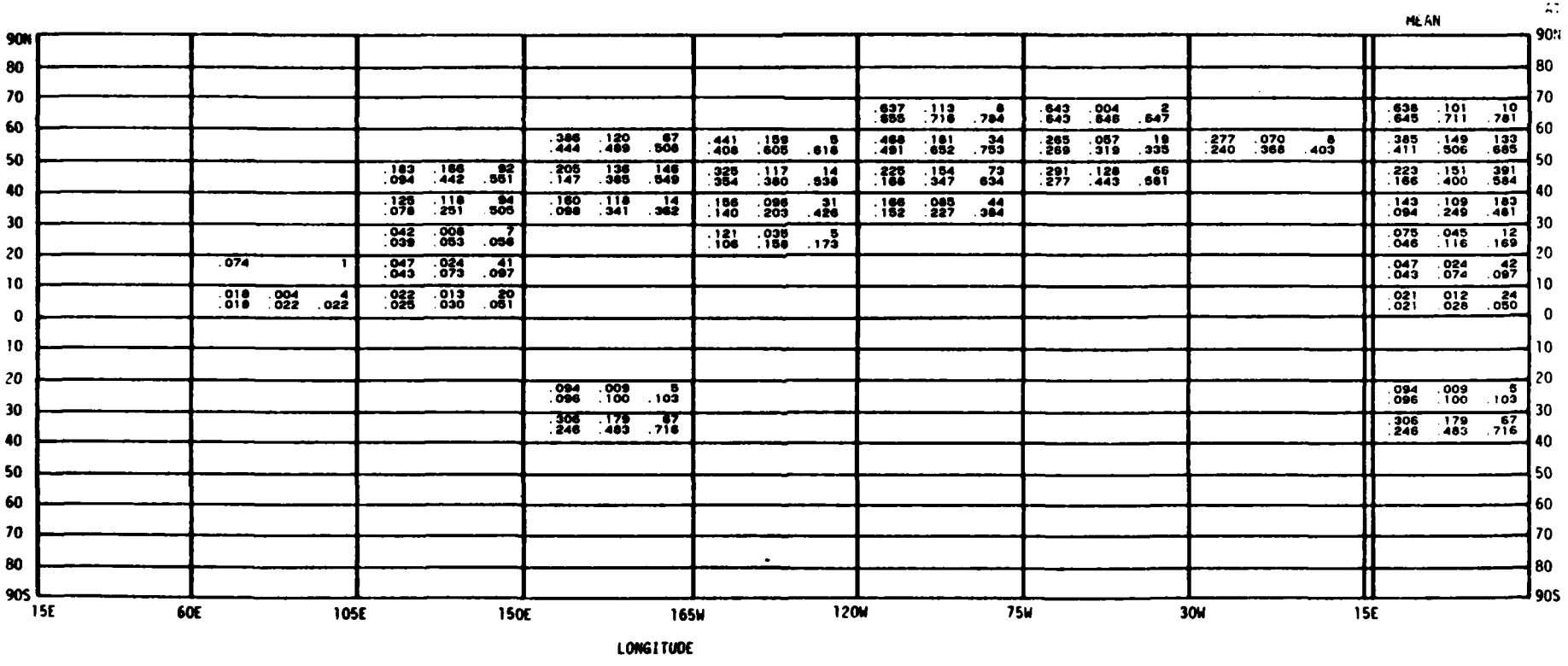

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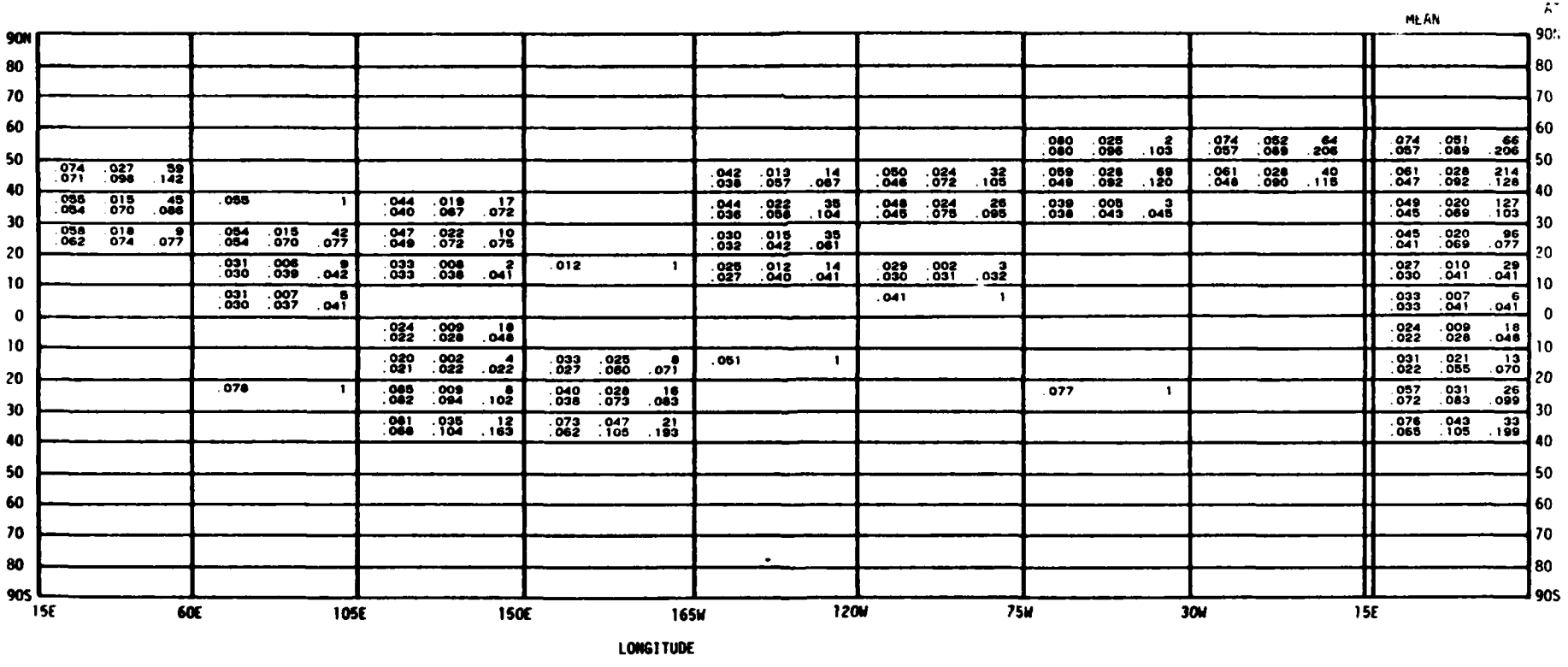

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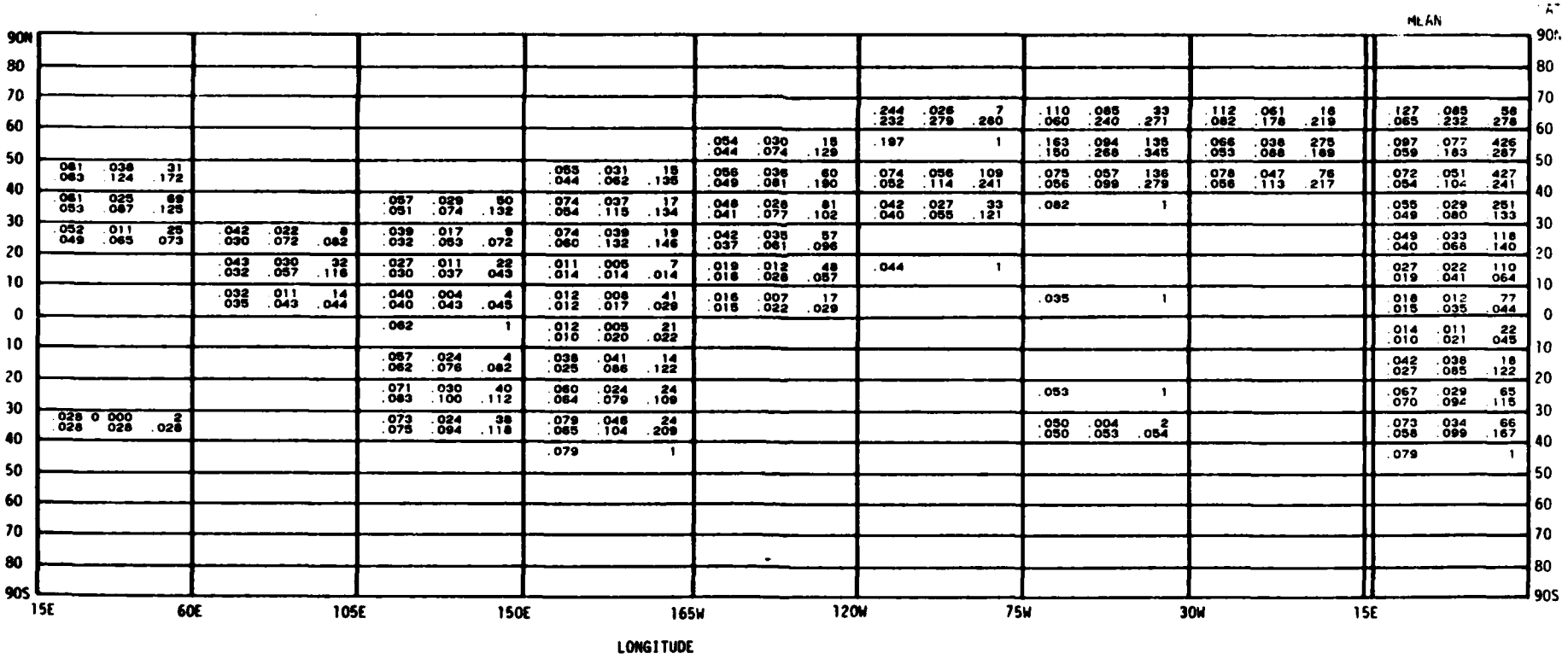

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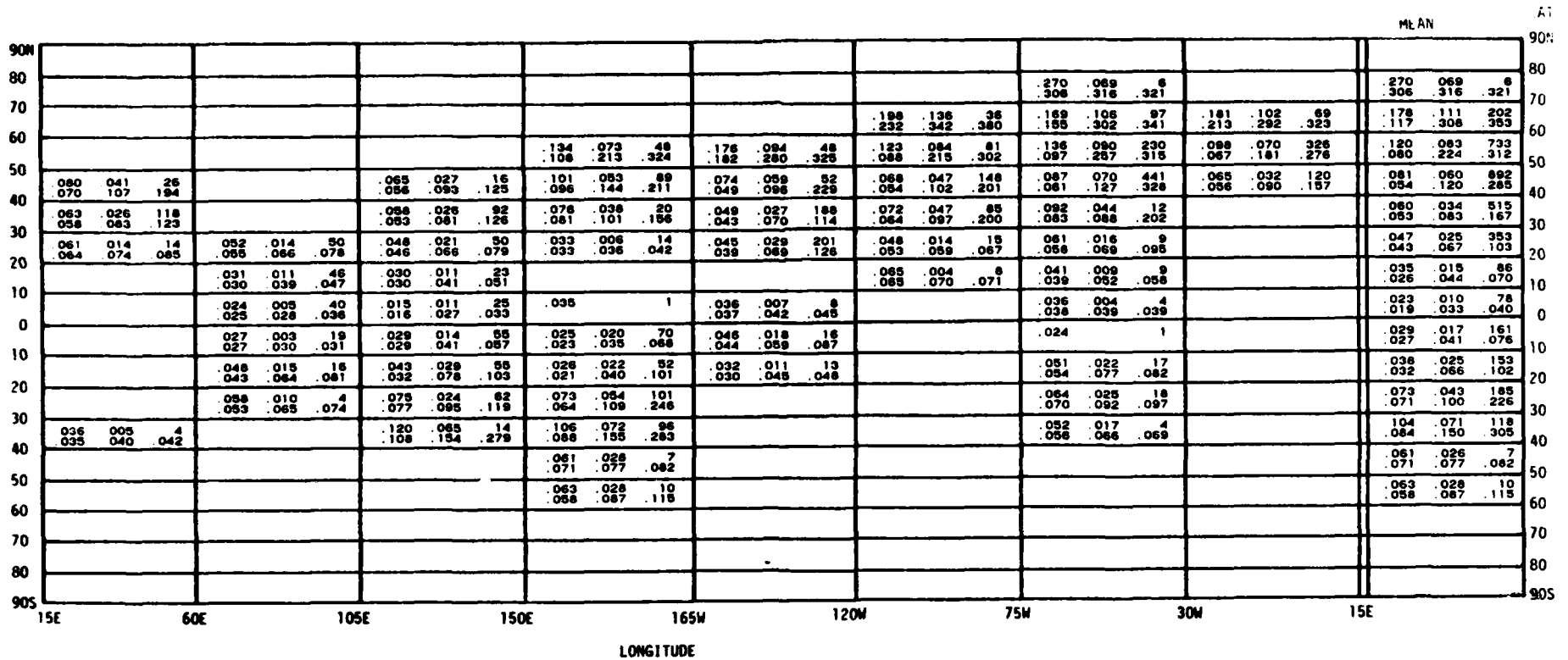

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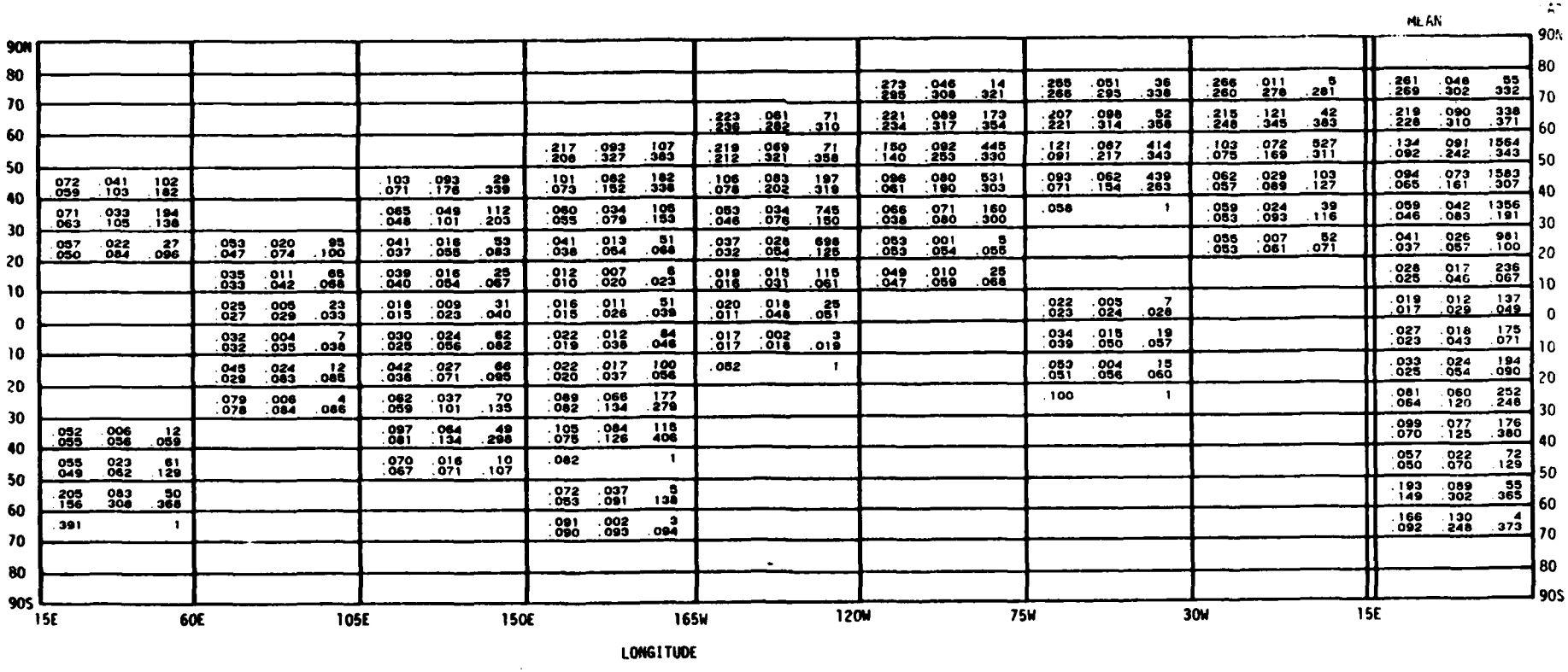

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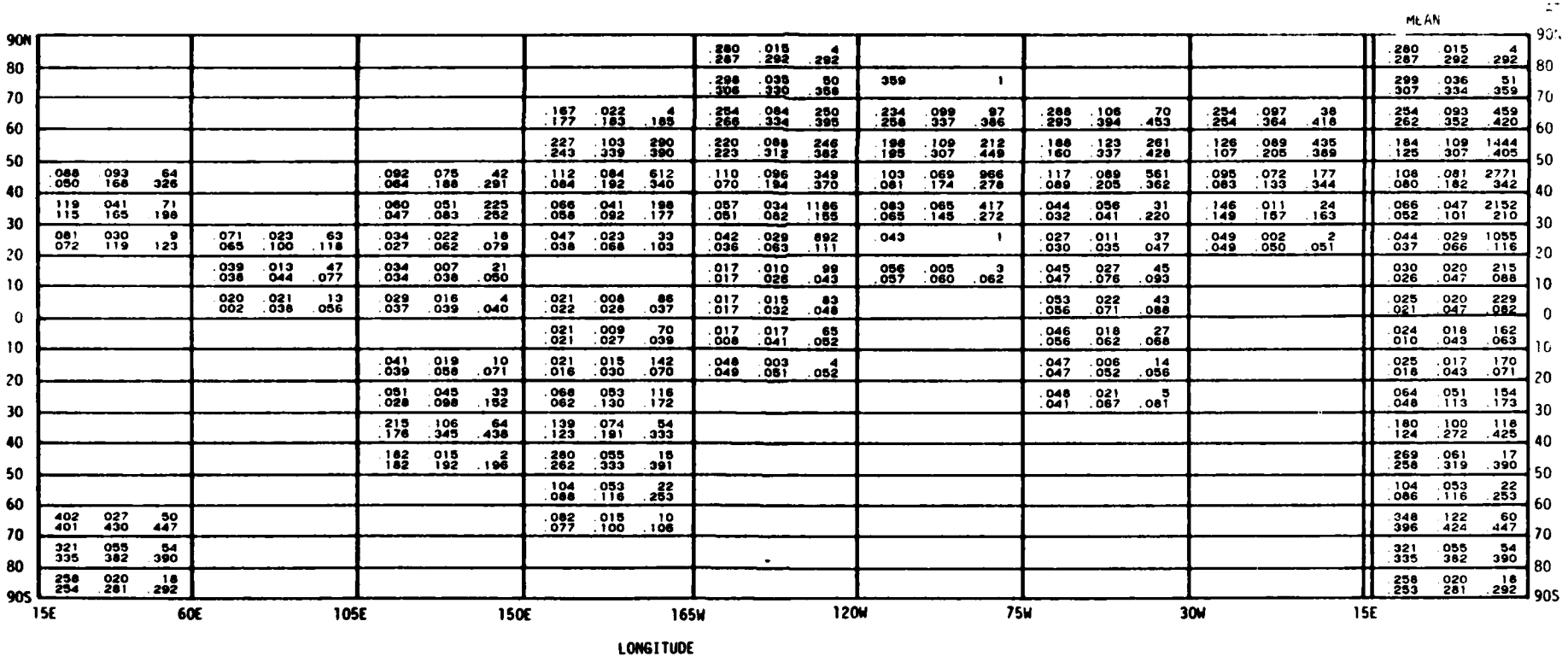

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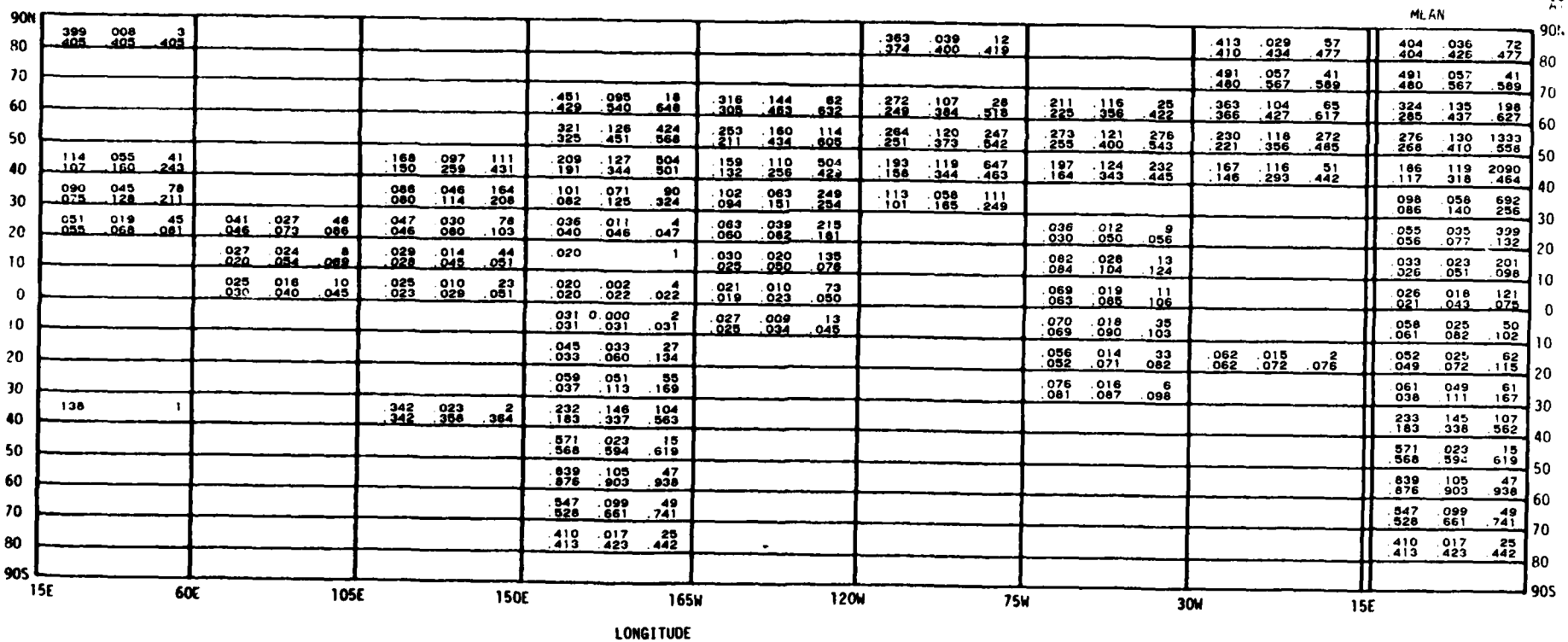

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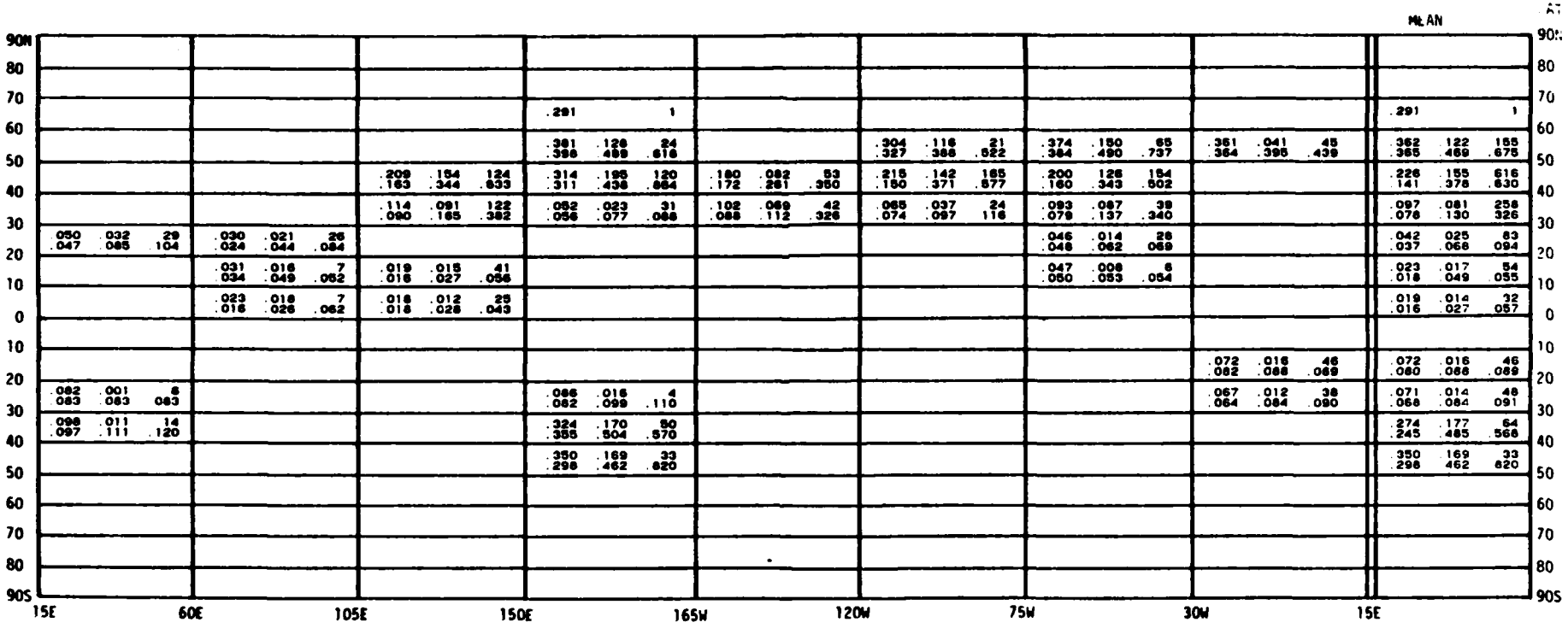

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1. Report No. NASA TM-82742 FAA-EE-83-12	2. Government Accession No.	3. Recipient's Catalog No.

4. Title and Subtitle	5. Report Date
Tabulations of Ambient Ozone Data Obtained by GASP Airliners: March 1975 to July 1979	January 1984
	6. Performing Organization Code 505-44-22
7. Author(s) William H. Jasperson and James D. Holdeman	8. Performing Organization Report No E-1055
	10. Work Unit No.
9. Performing Organization Name and Address National Aeronautics and Space Administration Lewis Research Center Cleveland, Ohio 44135	11. Contract or Grant No.
	13. Type of Report and Period Covered Technical Memorandum
12. Sponsoring Agency Name and Address National Aeronautics and Space Administration Washington, D.C. 20546	14. Sponsoring Agency Code

15. Supplementary Notes

William H. Jasperson, Control Data Corp., Minneapolis, Minnesota; James D. Holdeman, Lewis Research Center; work partly supported by FAA through interagency agreement DOT-FA78WAI-893.

16. Abstract

Tabulations are given of GASP ambient ozone mean, standard deviation, median, 84th percentile, and 98th percentile values, by month, flight level, and geographical region. These data are tabulated to conform to the temporal and spatial resolution required by FAA Advisory Circular 120-38 (monthly by 2000 ft in altitude by 5^{o} in latitude) for climatological data used to show compliance with cabin ozone regulations. In addition seasonal x 10^{o} latitude tabulations are included which are directly comparable to and supersede the interim GASP ambient ozone tabulations given in appendix B of FAA-EE-80-43 (NASA TM-81528). Selected probability variations are highlighted to illustrate the spatial and temporal variability of ambient ozone and to compare results from the coarse and fine grid analyses.

17. Key Words (Suggested by Author(s))	18. Distribution Statement
Ambient ozone Aircraft measurements GASP Cabin ozone	Unclassified - unlimited STAR Category 47

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of pages	22. Price*
Unclassified	Unclassified		

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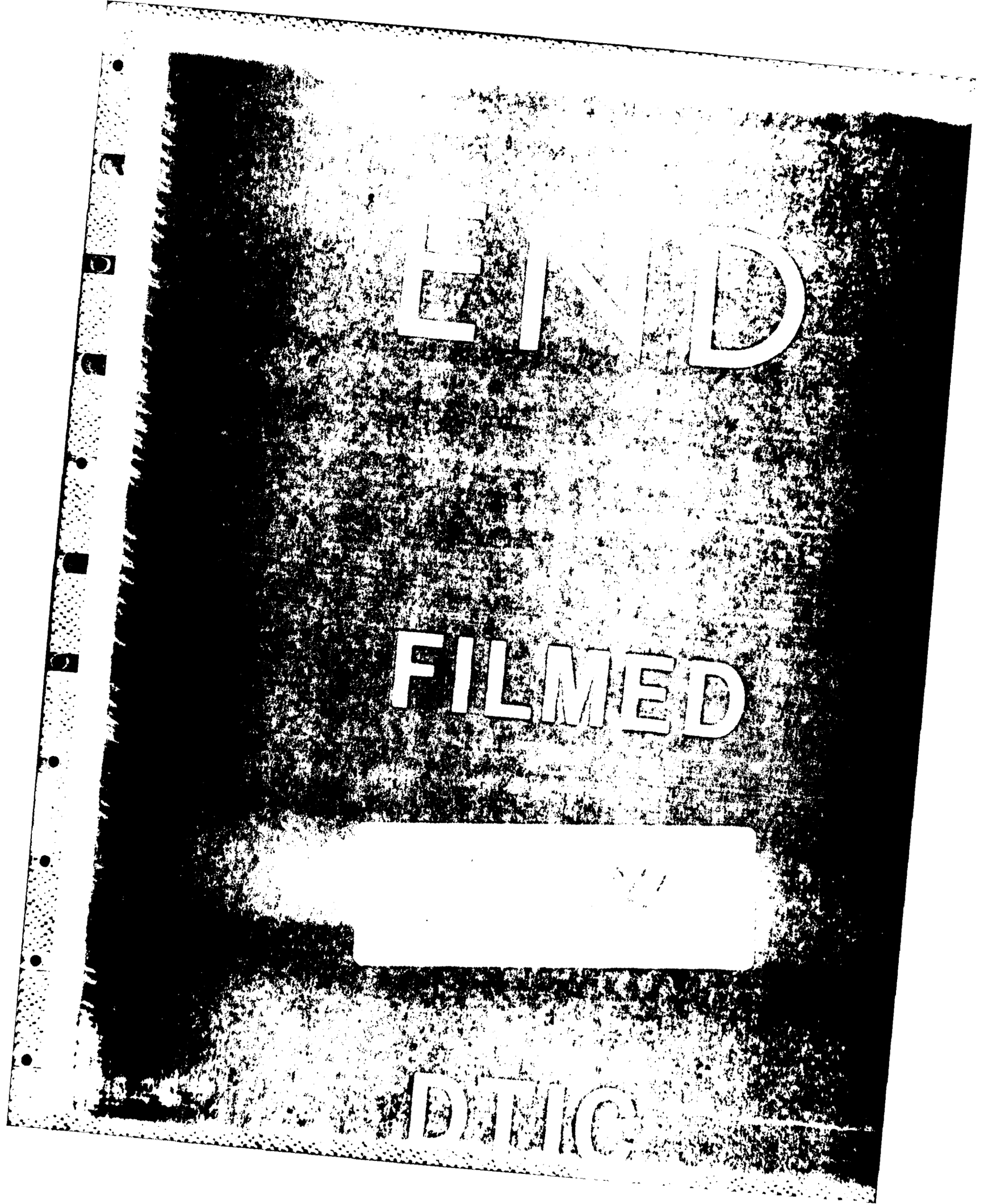
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